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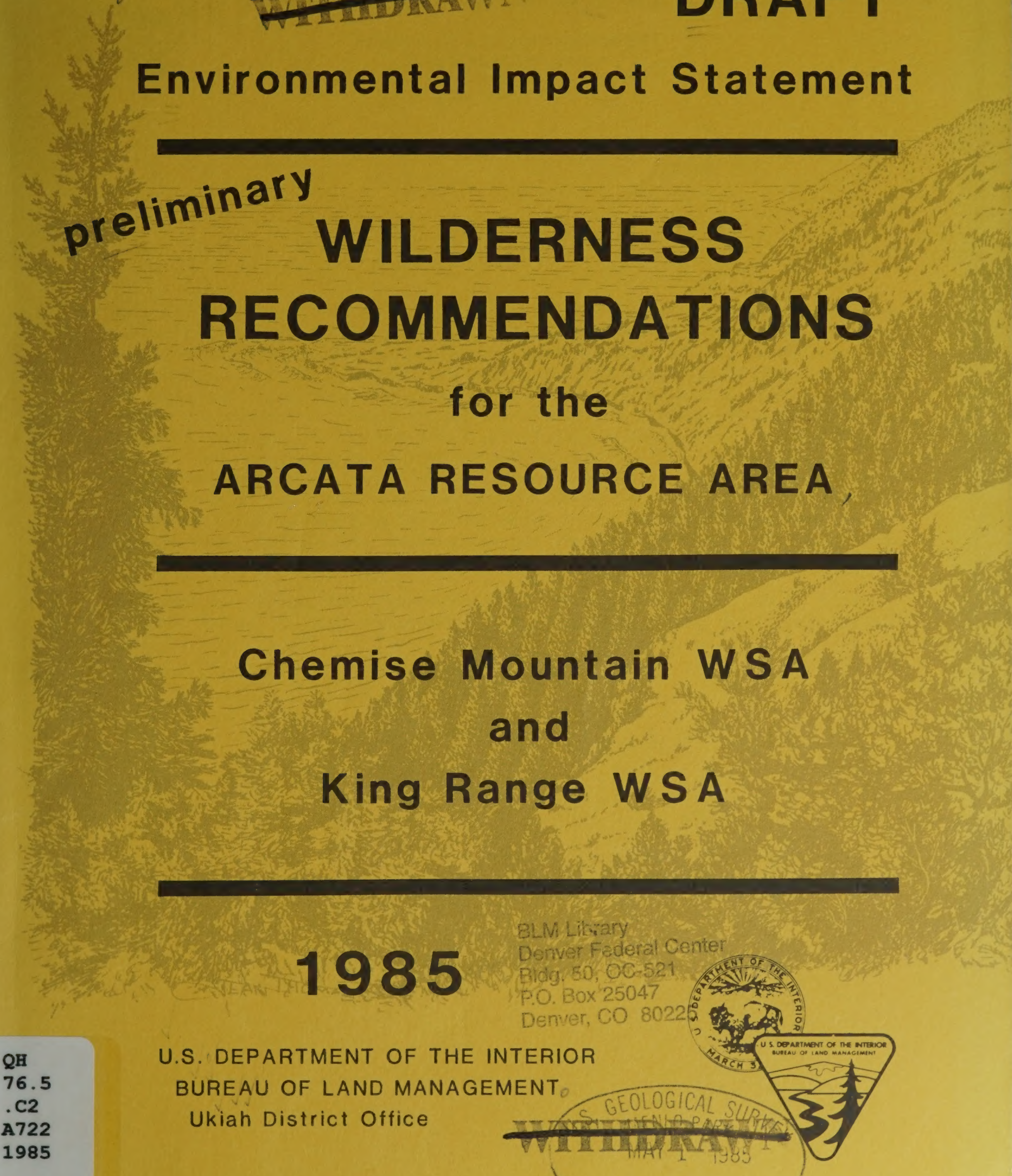

DRAFT

Environmental Impact Statement

preliminary WILDERNESS RECOMMENDATIONS for the ARCATA RESOURCE AREA

Chemise Mountain WSA
and
King Range WSA

1985

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
UKIAH DISTRICT OFFICE
P.O. Box 940
Ukiah, California 95482

March 1985

Enclosed for your review and comment is the draft Environmental Impact Statement (EIS) prepared for the King Range Wilderness Study Area (WSA) and the Chemise Mountain WSA in the Arcata Resource Area of the Ukiah District, California. The EIS considers the suitability of including 37,200 acres into the National Wilderness Preservation System. All recommendations contained herein are subject to change during administrative review. The statement was prepared pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969 and responds to the mandate of Section 603 of the Federal Land Policy and Management Act of 1976 to review all public land roadless areas of 5,000 acres or more and roadless islands having wilderness characteristics; determine their suitability or nonsuitability for wilderness designation; and report these suitability recommendations to the President no later than October 21, 1991.

For further information please contact: District Manager, Ukiah District Office, Bureau of Land Management, P.O. Box 940, Ukiah, California 95482-0940.

Sincerely,

Edwin G. Katlas
For Van W. Manning
District Manager

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DEPARTMENT OF INTERIOR

DRAFT ENVIRONMENTAL IMPACT STATEMENT

PRELIMINARY WILDERNESS RECOMMENDATIONS
FOR THE
ARCATA RESOURCE AREA

KING RANGE WSA
AND
CHEMISE MOUNTAIN WSA

Prepared by

Bureau of Land Management

Ukiah District Office, California

Ed Hastey

Edward L. Hastey
State Director, California

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ENVIRONMENTAL IMPACT STATEMENT ON THE PRELIMINARY WILDERNESS RECOMMENDATIONS FOR KING RANGE WSA AND CHEMISE MOUNTAIN WSA

Draft (X) Final ( ) Environmental Impact Statement

1. Type of Action: Administrative ( ) Legislative (X)

2. Abstract:

The Bureau of Land Management, Arcata Resource Area, Ukiah District, California, has analyzed the impacts and resource tradeoffs of a wilderness designation of the King Range Wilderness Study Area (WSA) and the Chemise Mountain WSA. This environmental impact statement also analyzes the impacts and tradeoffs of alternatives to wilderness designation, including partial wilderness, no action, and no wilderness. Wilderness characteristics and special features are examined. Recommendations are to designate about 21,200 acres of King Range WSA as wilderness, and to not designate any portion of Chemise Mountain as wilderness.

3. For further information contact:

District Manager
Bureau of Land Management
P. O. Box 940
Ukiah, California 95482
(707) 462-3873

4. Comments must be received by: July 1, 1985

SUMMARY

This environmental impact statement assesses the environmental consequences and wilderness characteristics of the King Range Wilderness Study Area (WSA) (CA-050-112) and the Chemise Mountain WSA (CA 050-111). Both WSAs are about 230 miles from San Francisco. King Range WSA is in Humboldt County and Chemise Mountain is in Mendocino and Humboldt counties.

Five alternatives and one subalternative were considered for King Range WSA, including two "all wilderness" alternatives, no action, and two "partial wilderness" alternatives. The Bureau's preliminary recommendation is to designate 21,200 acres of the King Range WSA as wilderness (Alternative 5).

Two alternatives were considered for Chemise Mountain: no action (primitive area) and "all wilderness". The Bureau's preliminary recommendation is to not designate Chemise Mountain as wilderness, but to continue management as a primitive area (Alternative 2).

A Summary of Impacts for both WSAs is given in Chapter 2.

King Range (CA-050-112)		Acres	
Alternative	County	Suitable	Nonsuitable
All Wilderness	Humboldt	29,300	0
All Wilderness-Plus	Humboldt	32,900	0
No Action	Humboldt	0	29,300
Partial Wilderness (DAC)	Humboldt	14,000	15,300
Proposed Action	Humboldt	21,200	8,100
Chemise Mountain (CA-050-111)			
All Wilderness	Humboldt	2,795	0
	Mendocino	1,505	0
Primitive Area	Humboldt	0	2,795
	Mendocino	0	1,505

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CHAPTER 1

PURPOSE OF AND NEED FOR ACTION

INTRODUCTION

This Environmental Impact Statement (EIS) considers the possible consequences of wilderness designation for two wilderness study areas (WSAs) in the Arcata Resource Area in the Ukiah District, California. Both WSAs are located within 230 miles of the San Francisco Bay Area (Map 1-1 and Map 1-2). The King Range WSA (CA-050-112) is in Humboldt County and covers 29,300 acres of public lands. The Chemise Mountain WSA (CA-050-111) is in Humboldt and Mendocino counties and covers 4,300 acres of public land.

PURPOSE AND NEED

The purpose of this action is to determine whether or not these areas, or portions of these areas, should be designated as suitable for inclusion in the National Wilderness Preservation System. This evolves from a requirement included by Congress in Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) directing the Secretary of the Interior and the Bureau of Land Management (BLM) to review roadless areas of 5,000 acres or more having wilderness characteristics and by 1991 to recommend to the President the suitability of such areas for preservation as wilderness. In determining these wilderness values, the law directs the Bureau to use the criteria given by Congress in the Wilderness Act of 1964. In Section 2(c) of the Act, Congress states that wilderness is essentially an area of undeveloped Federal land in a natural condition, without permanent improvements or human habitation, which has outstanding opportunities for solitude or a primitive and unconfined type of recreation. The area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

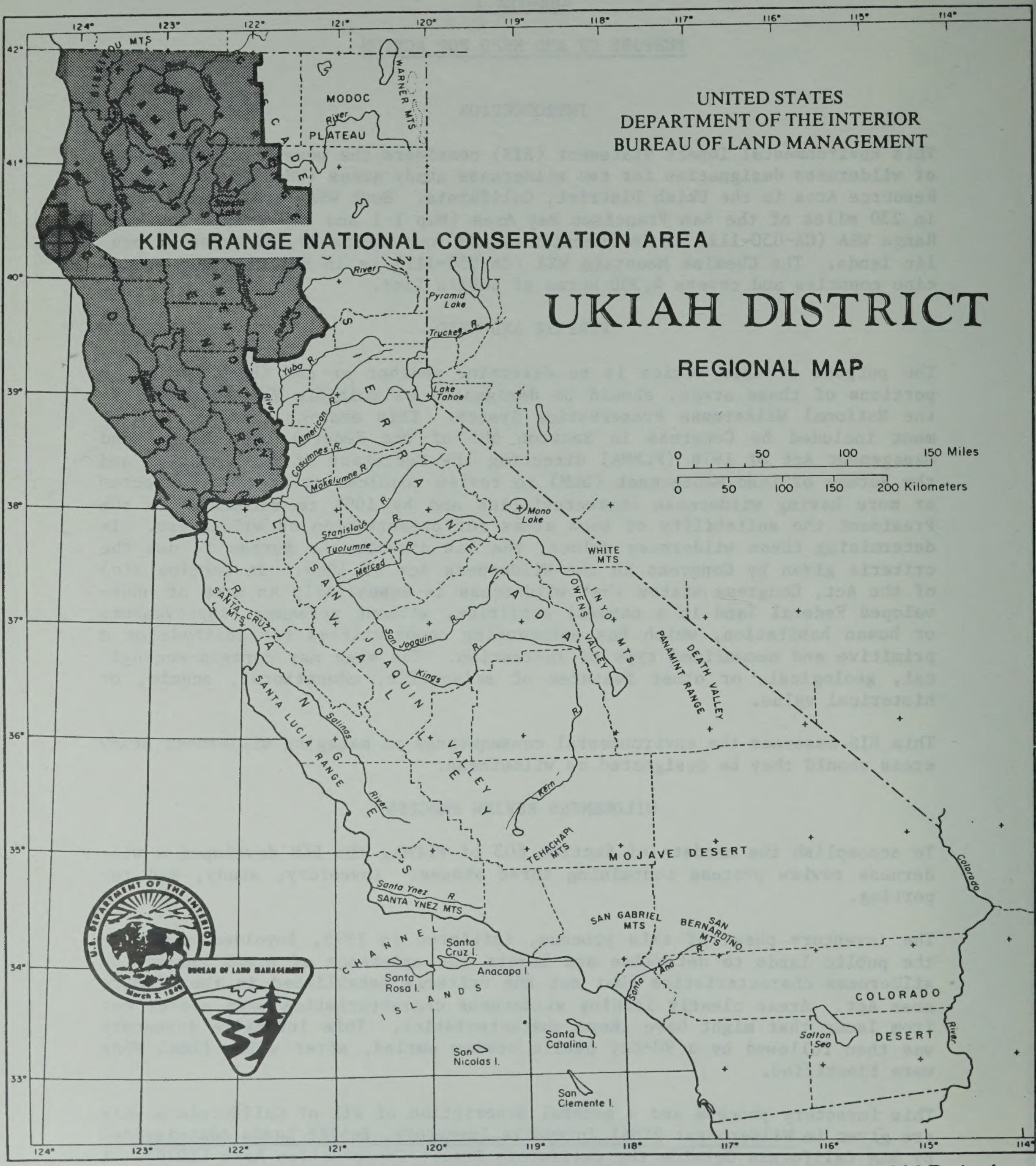
This EIS assesses the environmental consequences of managing wilderness study areas should they be designated as wilderness.

WILDERNESS REVIEW PROCESS

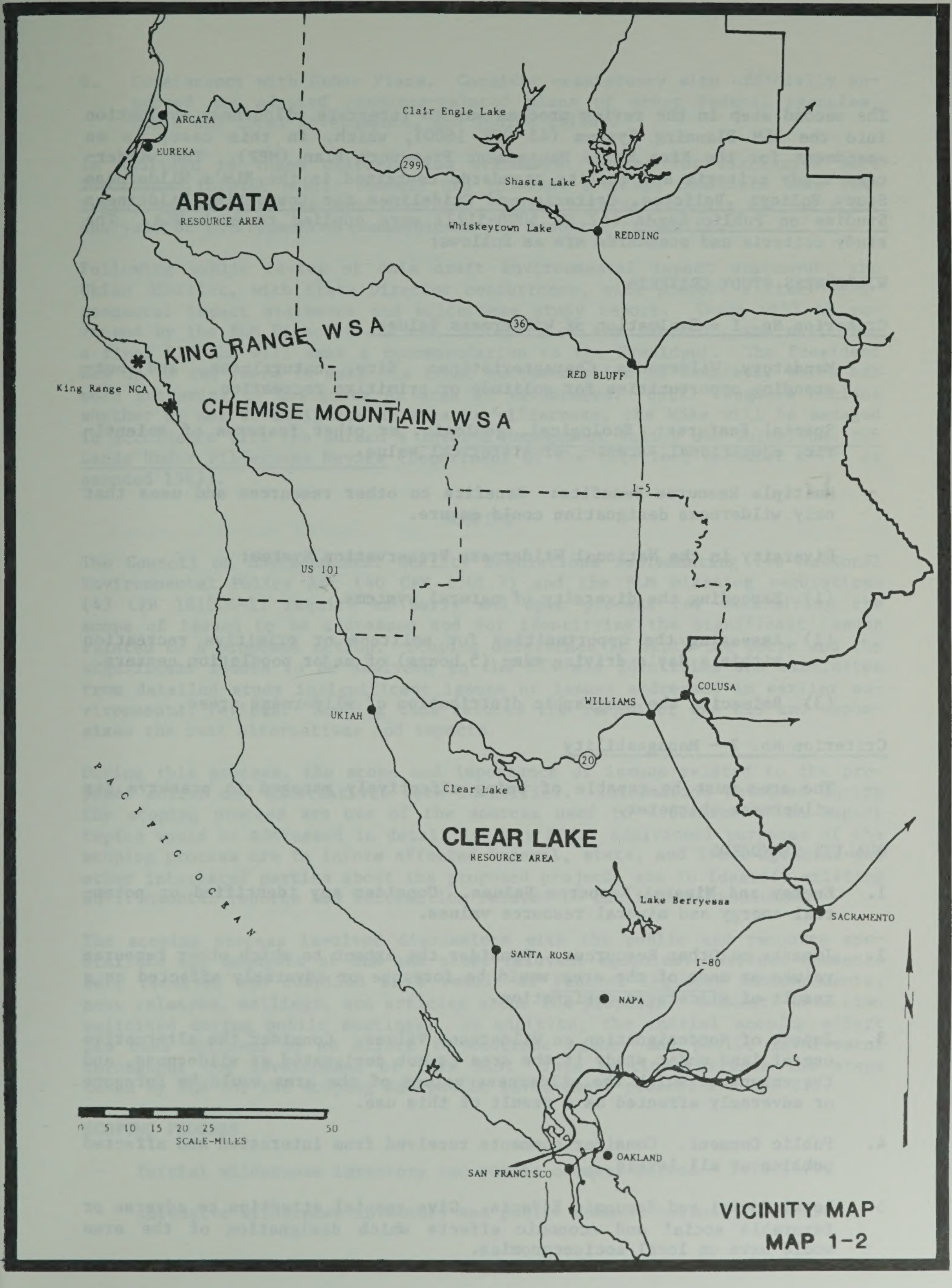
To accomplish the mandate of Section 603 of FLPMA, the BLM developed a wilderness review process containing three phases: inventory, study, and reporting.

The inventory phase of this process, initiated in 1978, involved examining the public lands to determine and locate the existence of areas containing wilderness characteristics that met the criteria established in the Wilderness Act. Areas clearly lacking wilderness characteristics were sorted out from lands that might have those characteristics. This intensive inventory was then followed by a 90-day public review period, after which final WSAs were identified.

This inventory process and a general description of all of California's WSAs are given in Wilderness: Final Intensive Inventory, Public Lands Administered by BLM California Outside the California Desert Conservation Area (1979). A copy of this publication is available at any BLM office.


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
UKIAH DISTRICT
REGIONAL MAP
KING RANGE NATIONAL CONSERVATION AREA
0 50 100 150 Miles
0 50 100 150 200 Kilometers
SISKIYOU MTS
MODOC PLATEAU
WARNER MTS
CASCADE
SIERRA NEVADA
Pyramid Lake
Truckee R.
Lake Tahoe
Mono Lake
WHITE MTS
OWENS VALLEY
INYO MTS
PANAMINT RANGE
DEATH VALLEY
Yuba R.
American R.
Cosumnes R.
Mokelumne R.
Stanislaus R.
Tuolumne R.
Merced R.
San Joaquin R.
Kings R.
Kern R.
SAN JOAQUIN VALLEY
SANTA CRUZ MTS
SANTA LUCIA RANGE
Salinas River
COAST RANGES
TEHACHAPI MTS
MOJAVE DESERT
Santa Ynez R.
SANTA YNEZ MTS
SAN GABRIEL MTS
SAN BERNARDINO MTS
Santa Ana R.
Colorado River
COLORADO DESERT
Salton Sea
CHANNEL ISLANDS
Santa Cruz I.
Santa Rosa I.
Anacapa I.
San Nicolas I.
Santa Catalina I.
San Clemente I.
124° 123° 122° 121° 120° 119° 118° 117° 116° 115° 114°
42° 41° 40° 39° 38° 37° 36° 35° 34° 33°
U.S. DEPARTMENT OF THE INTERIOR March 3, 1849
BUREAU OF LAND MANAGEMENT

MAP 1-1



VICINITY MAP

MAP 1-2

The second step in the review process was to integrate wilderness evaluation into the BLM Planning System (43 CFR 1600), which, in this case, is an amendment for the King Range Management Framework Plan (MFP). The wilderness study criteria and quality standards contained in the BLM's Wilderness Study Policy: Policies, Criteria and Guidelines for Conducting Wilderness Studies on Public Lands (47 FR 5098-5122) were applied to each WSA. The study criteria and standards are as follows:

WILDERNESS STUDY CRITERIA

Criterion No. 1 - Evaluation of Wilderness Values

- Mandatory Wilderness Characteristics: Size, naturalness, and outstanding opportunities for solitude or primitive recreation.
- Special Features: Ecological, geologic, or other features of scientific, educational, scenic, or historical value.
- Multiple Resource Benefits: Benefits to other resources and uses that only wilderness designation could ensure.
- Diversity in the National Wilderness Preservation System:
  (1) Expanding the diversity of natural systems.
  (2) Assessing the opportunities for solitude or primitive recreation within a day's driving time (5 hours) of major population centers.
  (3) Balancing the geographic distribution of wilderness areas.

Criterion No. 2 - Manageability

- The area must be capable of being effectively managed to preserve its wilderness character.

QUALITY STANDARDS

1. Energy and Mineral Resource Values. Consider any identified or potential energy and mineral resource values.
2. Impacts on Other Resources. Consider the extent to which other resource values or uses of the area would be foregone or adversely affected as a result of wilderness designation.
3. Impact of Nondesignation on Wilderness Values. Consider the alternative use of land under study if the area is not designated as wilderness, and the extent to which the wilderness values of the area would be foregone or adversely affected as a result of this use.
4. Public Comment. Consider comments received from interested and affected publics at all levels.
5. Local Social and Economic Effects. Give special attention to adverse or favorable social and economic effects which designation of the area would have on local socioeconomics.

6. Consistency with Other Plans. Consider consistency with officially approved and adopted resource-related plans of other Federal agencies, state and local governments, and Indian tribes.

In addition to these criteria and standards, issues for discussion were identified through public comment and internal scoping, conflicts were analyzed, and alternatives were developed. These alternatives are the basis for analysis of environmental consequences and resource tradeoffs.

Following public review of this draft environmental impact statement, the Ukiah District, with State Director concurrence, will prepare a final environmental impact statement and wilderness study report. These will be reviewed by the BLM Director and the Secretary of the Interior, who will file a final EIS and will make a recommendation to the President. The President has up to two years to make his final recommendation to Congress, which has sole authority to designate an area as wilderness. Until Congress decides whether or not to designate an area as wilderness, the WSAs will be managed in accordance with the Bureau's Interim Management Policy and Guidelines for Lands Under Wilderness Review (Department of the Interior, December 1979, as amended 1983).

SCOPING

The Council on Environmental Quality Regulations Implementing the National Environmental Policy Act (40 CFR 1501.7) and the BLM planning regulations (43 CFR 1610.4-1) require an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. Scoping determines in depth the scope and the significant issues to be analyzed in the EIS and identifies and eliminates from detailed study insignificant issues or issues addressed in earlier environmental reviews. Scoping thus reduces the length of the EIS and emphasizes the real alternatives and impacts.

During this process, the scope and importance of issues related to the proposed action and alternatives were identified. Information obtained during the scoping process was one of the sources used to determine which impact topics would be addressed in detail in this EIS. Additional purposes of the scoping process are to inform affected Federal, state, and local agencies and other interested parties about the proposed project, and to identify existing environmental reports and information related to the impact assessment.

The scoping process involved discussions with the public and resource specialists and managers of BLM and other relevant agencies. Written comments were received and compiled as a result of Federal Register announcements, news releases, mailings, and articles about the proposal. Comments were also solicited during public meetings. In addition, the initial scoping effort has been followed by an effort to continue agency and public involvement throughout the development of this EIS. This section outlines the steps taken by BLM for the scoping and public involvement process for the EIS.

SCOPING PROCESS

- Initial wilderness inventory and public comment period - 1978-1979.

- Intensive wilderness inventory and public comment period - 1979-1980.

- A Notice of Intent to prepare an amendment to the King Range Management Framework Plan and the environmental impact statement for the two wilderness study areas was published in the Federal Register on December 30, 1983.

- A scoping letter was mailed in March 1984 to over 1,000 organizations, agencies, and individuals on the Ukiah District's mailing list. This letter explained the planning process and asked for identification of issues for the wilderness study areas. As of November 1, 1984, only 21 responses to the letter had been received.

- In June 1984 a technical review team (TRT) was formed by the Ukiah District Advisory Council (DAC) to study wilderness issues in detail and to make a recommendation to the council. The TRT consisted of seven interest categories: wilderness and dispersed recreation, recreation, forestry, wildlife, soils and watershed, grazing and landowners, and local planning. Members with expertise in each category were chosen by the DAC and given a two-day field orientation in late June. The TRT held two meetings to discuss issues and alternatives.

- The Ukiah District Advisory Council, after reviewing the TRT's report, was given a field orientation of the King Range in August 1984. The DAC met to discuss the issues and made a recommendation to the District Manager on October 15, 1984. This recommendation is presented as Alternative 4 in Chapter 2.

ISSUES

The following concerns have been raised during some phase of this wilderness study process and are summarized here as being worthy of further discussion:

1. Recreation. The existing King Range Management Plan includes some intensive recreational developments near the coast which would not be consistent with wilderness. Also, vehicular access to the beach and for hunting would be more limited within wilderness than under the existing plan. The social impact on users, such as an older person who cannot hike in the rugged terrain, is a concern as the existing plan allows for developments to accommodate a broader scope of people than would wilderness.

2. Livestock grazing. The northern portion of the King Range WSA has four grazing leases, and concern has been expressed that wilderness may limit vegetation manipulation and range improvements. Another concern is that wilderness designation may hinder predator (coyote, bear, mountain lion) control, and that livestock on private land near the wilderness would be subject to predators living within the wilderness.

3. Timber Management. Timber harvest is allowed in Zones 6 and 7 (eastern portion of the King Range) under the existing plan, and this would be precluded by wilderness designation.

4. Soils/Watershed. Much of the acquired land within the King Range has been disturbed by logging and poor road building. Concern has been raised that wilderness may hinder rehabilitation work by limiting the use of heavy equipment.

5. Minerals/Energy. There is some privately owned mineral estates (Federal surface) interspersed throughout the King Range. Mineral potential is low, but there is the possibility of nuisance developments. King Range has been identified by the California Energy Commission as having potential for wind energy development which may be affected by wilderness designation.

6. Fire Management. Concern has been raised that wilderness could hinder fire presuppression and suppression activities in an area prone to fire.

7. Wildlife Habitat. There is concern that habitat manipulation for the benefit of big game, such as the reintroduced Roosevelt elk, may be limited by wilderness designations.

8. Wilderness Values. Wilderness supporters are concerned that the mandatory wilderness values within the King Range, naturalness and opportunities for solitude or primitive and unconfined recreation, will eventually be adversely affected by developments, possibly irreversibly, unless the area is added to the National Wilderness Preservation System.

The scoping process also identified resources or issues for which there was little concern or which would not be significantly impacted by any of the alternatives. These include geology, air quality, climate, water resources, and common vegetation. Some of these are discussed in the Affected Environment section to help the reader better understand the King Range area.

CHAPTER 2

ALTERNATIVES INCLUDING THE PROPOSED ACTION

INTRODUCTION

This chapter describes in detail the alternatives, including the proposed action, selected for analysis in this study. The non-wilderness (No Action) and all-wilderness alternatives for each WSA were included as a requirement of the wilderness study policy. In addition, several partial wilderness alternatives were developed for the King Range WSA to resolve resource conflicts. The selection of these alternatives was based on issues identified during the scoping process, resource conflicts, and wilderness study requirements. These alternatives provide BLM managers and others a wide range of options from which to develop wilderness recommendations.

WILDERNESS MANAGEMENT POLICY AND STANDARD MANAGEMENT PRACTICES

Certain standard management practices directed by regulation and policy would be applicable to all alternative management programs. Protection of soils, watershed, visual resources, air quality, and other resources is required by the Federal Land Policy and Management Act of 1976. Specific guidance for these measures are embodied in numerous policy statements and regulations. Compliance with specific legislation such as the Endangered Species Act and the Antiquities Act is required. Mining is a nonconforming use which is allowed in wilderness areas. Mining is controlled under all alternatives by the King Range Mining regulations (43 CFR 3827) to minimize adverse environmental impacts.

Until either released or designated by Congress, the WSAs will be managed under the Interim Management Policy and Guidelines for Lands Under Wilderness Review. These guidelines and policy will guide BLM staff in making decisions that arise in everyday management of lands under wilderness review to ensure that actions are not taken on public lands that would degrade wilderness values and constrain the Secretary's recommendations with respect to an area's suitability. In addition, some "grandfathered" uses will be allowed within an area. Such uses occurred on the lands before the passage of the Federal Land Policy and Management Act (FLPMA) on October 21, 1976. The uses described by Congress were existing mining and grazing and mineral leasing in the same manner and degree in which they were being conducted on the date of FLPMA's passage.

BLM will manage newly designated wilderness areas under the provisions of the 1964 Wilderness Act, FLPMA, and BLM's Wilderness Management Policy. The standard policies of the Wilderness Management Policy may be amended to include requirements of the law designating the wilderness area. Section 4 of the Wilderness Act states that wilderness areas should be devoted to recreational, scenic, scientific, educational, conservation, and historic use. Subpart C of Section 4 sets the limit on use, and Subpart D of Section 4 identifies provisions allowing specific activities.

Following are some of the activities that would be allowed in designated wilderness areas.

- The use of aircraft or motorboats, where these uses have already become established, may be allowed to continue, and aircraft and motorboats could be used for fire, insect, and disease control. These activities would be subject to conditions deemed desirable by the managing department head.
- Mineral prospecting will be allowed until designation if compatible with the preservation of wilderness. Mining and mineral leasing laws in effect before designation would remain in effect, subject to Department of the Interior regulations governing access.
- Development work, extraction, and patenting of mining claims will be allowed to continue after designation only on valid claims located on or before that date. In the development and operation of mining claims, claimants will be required to prevent unnecessary or undue degradation of the land. Mechanized ground and air equipment may be allowed, but disturbed land surfaces must be restored.
- If in the public interest, the President may authorize establishing and maintaining reservoirs, power projects, transmission lines, roads, and other such facilities in wilderness areas.
- Commercial activities could be allowed within wilderness areas to serve recreation or other wilderness purposes.
- The Wilderness Act does not exempt the affected resources from state water laws or the state jurisdiction and responsibilities for wildlife and fish in the area.
- Access to state or privately owned land surrounded by wilderness will be guaranteed.
- Grazing of livestock, where established prior to the effective date of the Act designating the area as wilderness, shall be permitted to continue subject to the Wilderness Study Policy and the BLM grazing regulations (43 CFR 4100). Existing grazing may include not only the utili- zation of the forage resource, but also the use and maintenance of livestock management improvements and facilities associated with the grazing activity at the time of designation.
- Vegetative manipulation projects for fish and wildlife purposes may be approved by the State Director on a project-by-project basis if they do not degrade wilderness character, or if they correct conditions which are a result of human influence, or if the project will promote the perpetuation of a threatened or endangered species.

  Habitat manipulation by chemical or mechanical means may only be approved on a project-by-project basis where necessary for threatened or endangered species, or to correct unnatural conditions resulting from human influence.

Certain permanent installations to maintain conditions for wildlife and fish, upon consideration of their design, placement, duration, and use, may be permitted if the resulting change is compatible with preservation of wilderness character and is consistent with wilderness management objectives for the area, and if the installations are the minimum necessary to accomplish the task. Permissible actions under these criteria may include: installations to protect sources of water on which wildlife depend (such as enclosures) and water sources (such as springs, wells, and guzzlers).

Where control of predators is necessary to protect threatened or endangered wildlife species or on a case-by-case basis to prevent special and serious losses of domestic livestock, it will be accomplished by methods which are directed at eliminating the offending individuals while presenting the least possible hazard to other animals or wilderness visitors. Poison baits or cyanide guns are not compatible.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

The small size, compact shape, and lack of resource conflicts make a partial wilderness alternative for Chemise Mountain impractical and unnecessary; therefore, there is no partial wilderness alternative for Chemise Mountain.

The King Range WSA easily lends itself to innumerable variations of partial wilderness alternatives. However, the philosophy of alternative formulation is to restrict this study to detailed analysis of alternatives which address an issue, a significant resource conflict, manageability problems, or the quality of mandatory wilderness characteristics.

Another postulate of this study is to restrict analysis to the issue of wilderness suitability and any relevant, proximate issues, rather than to reanalyze all of the issues which were addressed in the 1974 final environmental impact statement for the King Range National Conservation Area. For this reason, alternatives which include analysis of opening or closing the entire beach to vehicles was not included. "No Wilderness" alternatives which change the management direction of the zones were also not included.

DESCRIPTION OF ALTERNATIVES INCLUDING THE PROPOSED ACTION

ACTIVITIES COMMON TO ALL ALTERNATIVES

Several programs which have been ongoing since passage of the King Range Act are legitimate activities for all of the alternatives. Rehabilitation of the watersheds, particularly on acquired lands, will be part of all alternatives to enhance the primitive and scenic qualities, reduce erosion and improve water quality, and improve wildlife habitat. Wilderness designation will not significantly hinder the ability of the BLM to plant native species, remove log jams, or rehabilitate roads, as these activities will enhance the mandatory wilderness characteristics.

A 10-year King Range Big Game Habitat Management Plan was prepared and approved in 1983 between the BLM and Region 1 of California Department of Fish and Game. The management objectives of improving deer and elk habitat are allowed under all alternatives. Concern was expressed during internal scoping that wilderness designation would unduly hinder such projects by restricting vehicle access to hunters and project crews on certain roads. There are many miles of recognized access corridors in the King Range that will be kept open under all alternatives to provide public and/or administrative access, so this concern has little merit. Also, some of the projects, such as elk reintroduction, are more of an interim management problem which will either be completed or abandoned because of failure prior to wilderness designation. While wilderness designation may put some minor restrictions on the actual types of implementation, it does not significantly affect legitimate wildlife habitat improvement projects or population controls.

Acquisition of private lands within the King Range National Conservation Area will continue under all alternatives.

Small, primitive, ridgetop helipads to enhance fire control and management activities will be allowed under all alternatives.

Known prehistoric cultural resource sites along the beach are currently being fenced and preserved; however, these sites are always in danger of being destroyed by high tides during storms. The Punta Gorda lighthouse needs continual maintenance to protect it from the salt air. Protection and study of all of these sites will be allowed under all alternatives.

During the wilderness inventory several "roads" were identified that penetrate the WSA. These access routes are generally well maintained and historically have provided access for sheep ranching, recreation, and logging. Because of the active land acquisition that was occurring during the wilderness inventory, the roads that did not form a boundary of the WSA were excluded from the final wilderness map. The assumption was that some of these roads could possibly be rehabilitated after all private land was acquired, so emphasis was not placed on the significance of these roads when the final WSA boundaries were determined.

Several private parcels and interests still exist which require vehicular access, and the BLM has determined that administrative access is necessary for proper management of the area. Therefore, several access routes are identified (see alternative maps) which, upon further analysis of need, watershed considerations, and maintenance feasibility and at the discretion of the Bureau of Land Management, may be used for vehicular access under all alternatives.

KING RANGE WILDERNESS STUDY AREA (CA-050-112)

Alternative 1 - All Wilderness

Area Designation

-- Wilderness - 29,300 acres

Description

This alternative would designate the King Range WSA as identified in the final inventory, not including split estate (public surface and private mineral estate), as wilderness to be managed according to the Wilderness Management Policy (Map 2-1). This alternative is the official 603 wilderness study area which resulted from the Director's instructions to amend the wilderness inventory decisions (Instruction Memorandum No. 83-188). The Smith-Etter Road bisects the WSA because it terminates on private land, so technically two separate wilderness study areas exist, one north of the road which totals 6,900 acres, and one south of the road which totals 22,400 acres.

The Smith-Etter Road would be maintained to provide landowner access, for BLM administration of the wilderness, and to provide vehicular access for the public, for hunters, and to provide enjoyment of the King Range to a broad range of publics. If the private land at the terminus of the road is acquired, it could be used to provide parking and administrative facilities, and the road would be maintained.

The area would be withdrawn from mineral entry as of the date of designation, and the King Range Mining Regulations (43 CFR 3827) will apply to existing claims in the wilderness area.

The King Range Act provides some management authority that is unique to the King Range. The BLM has the power of eminent domain to acquire land or interests which are incompatible with the purposes of the Act or management plan (43 CFR 2137.0-9). This authority could be used when necessary to enhance or maintain wilderness values, including acquiring private mineral estate if wilderness values are gravely threatened.

The portion of the beach below mean high tide between Telegraph Creek and Gitchell Creek would remain open to vehicles. It should be noted that the wilderness boundary where public lands come to the beach is mean high tide. From mean high tide to three miles out to sea is land owned by the State of California. The BLM maintains closure of the beach below mean high tide under authority of the California State Lands Commission. Vehicles driving on the beach below mean high tide are not within the wilderness area.

Livestock grazing would continue as established prior to wilderness designation, and predator control would be allowed within the wilderness under the constraints of the Wilderness Management Policy.

Alternative 2 - All Wilderness - Plus

Area Designation

-- Wilderness - 32,900 acres

Description

Under this alternative the entire WSA as identified in the final inventory would be designated wilderness. This alternative includes split estate lands because the low mineral values indicated in the USGS-BOM Report make the exclusion of split estate lands from wilderness consideration unwarranted. Split estate lands are included under the authority of Section 202 of the Federal Land Policy and Management Act of 1976. The acreage figure does not include private land (Map 2-2), but as private lands are acquired they would be automatically added to the wilderness. The area would be managed in accordance with the Wilderness Management Policy.

As in Alternative 1, the Smith-Etter Road technically bisects the WSA into two separate wilderness area; 9,800 acres are north of the road and 23,100 acres are south of the road. This road will be maintained to provide access to private land, administrative use, hunter access, and to provide enjoyment of the King Range to a broad range of publics. Roads and ways within the wilderness which are no longer needed would be reclaimed as much as practical or maintained as part of a trail system.

The regulations that apply specifically to King Range, such as mining (43 CFR 3827) and condemnation authority (43 CFR 2137.0-9), would apply.

The portion of the beach from Telegraph Creek to Gitchell Creek would remain open to vehicles. The wilderness boundary in this area is defined as being the existing way immediately above the beach.

Livestock grazing would continue as established prior to wilderness designation, and efficient predator control would be allowed within the wilderness for animals destroying livestock inside or outside the wilderness.

Alternative 3 - No Action (No Wilderness)

Area Designation

-- Wilderness - 0 acres

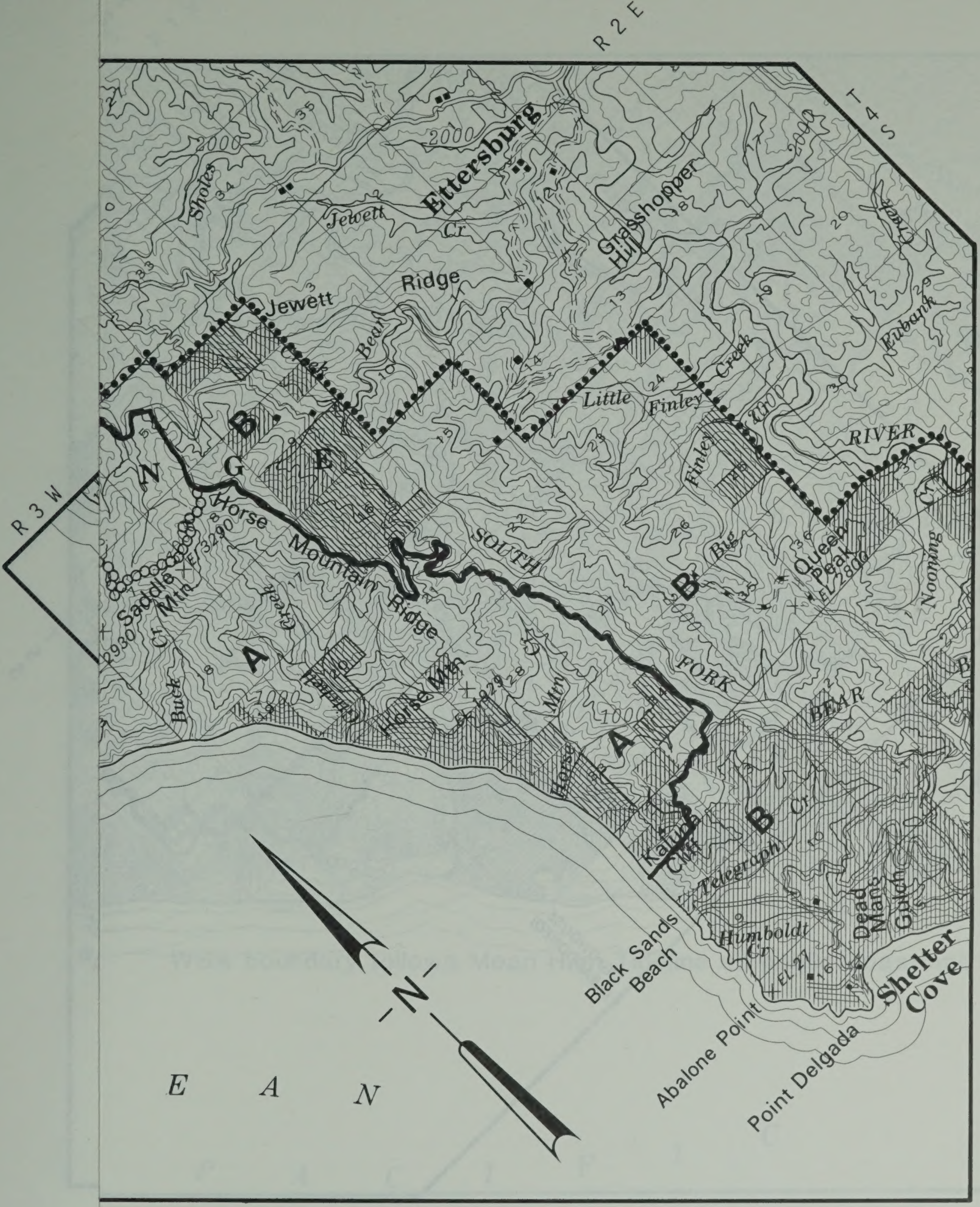
Description

This alternative is continuation of the existing King Range Management Program as approved by the Secretary of the Interior in 1974, including the Extension Area.

The zones involved in the King Range WSA are Zones 1, 2, 3, 6, and 7 (Map 2-3).

Zone 1 - Punta Gorda. The primary use of the small zone is recreation, with the Punta Gorda lighthouse being the focus of interest.

Zone 2 - West Slope (including the Extension Area). The primary use of this zone is recreation. The major objective is to retain the wild and scenic values of the steep mountainous terrain facing the ocean and to preserve the unique character of the beach. The entire beach in this zone is closed to



Arcata Resource Area
Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 1
All Wilderness

MAP
2-1

Description

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Description

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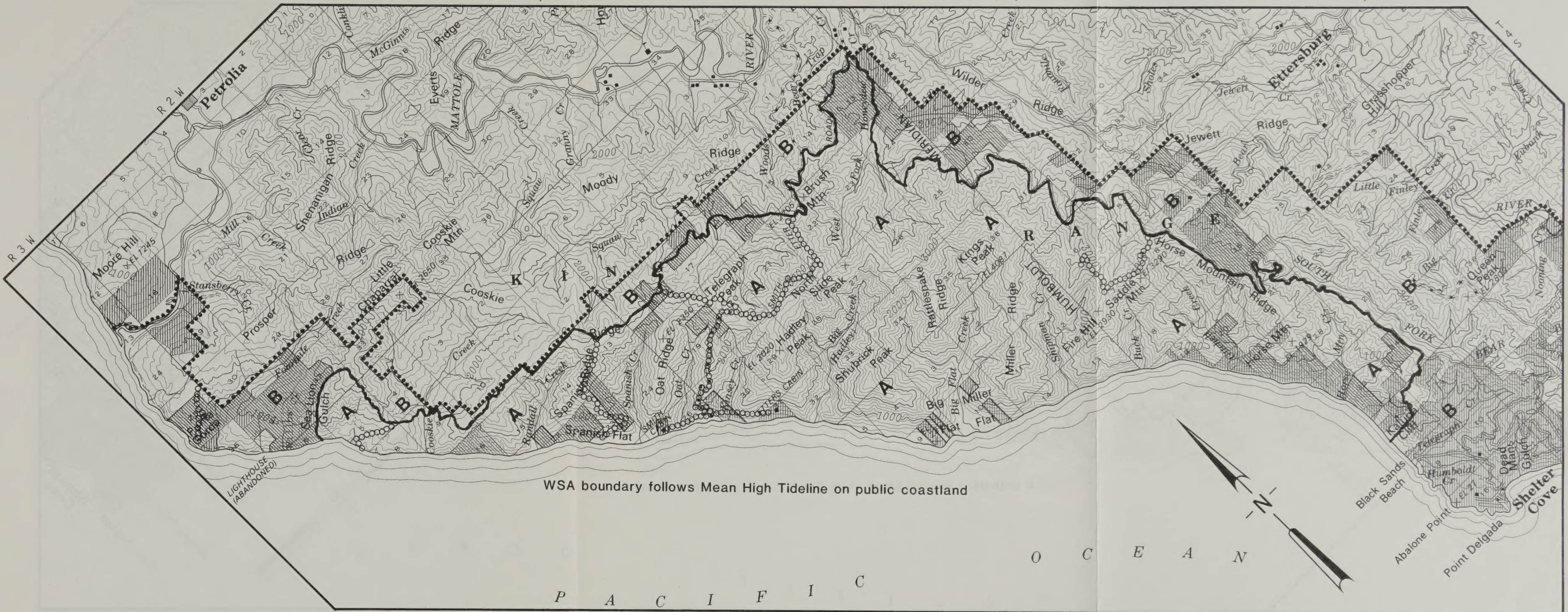


Scale: 3/4" = 1 Mile
Contour Interval: 200 Feet

Legend

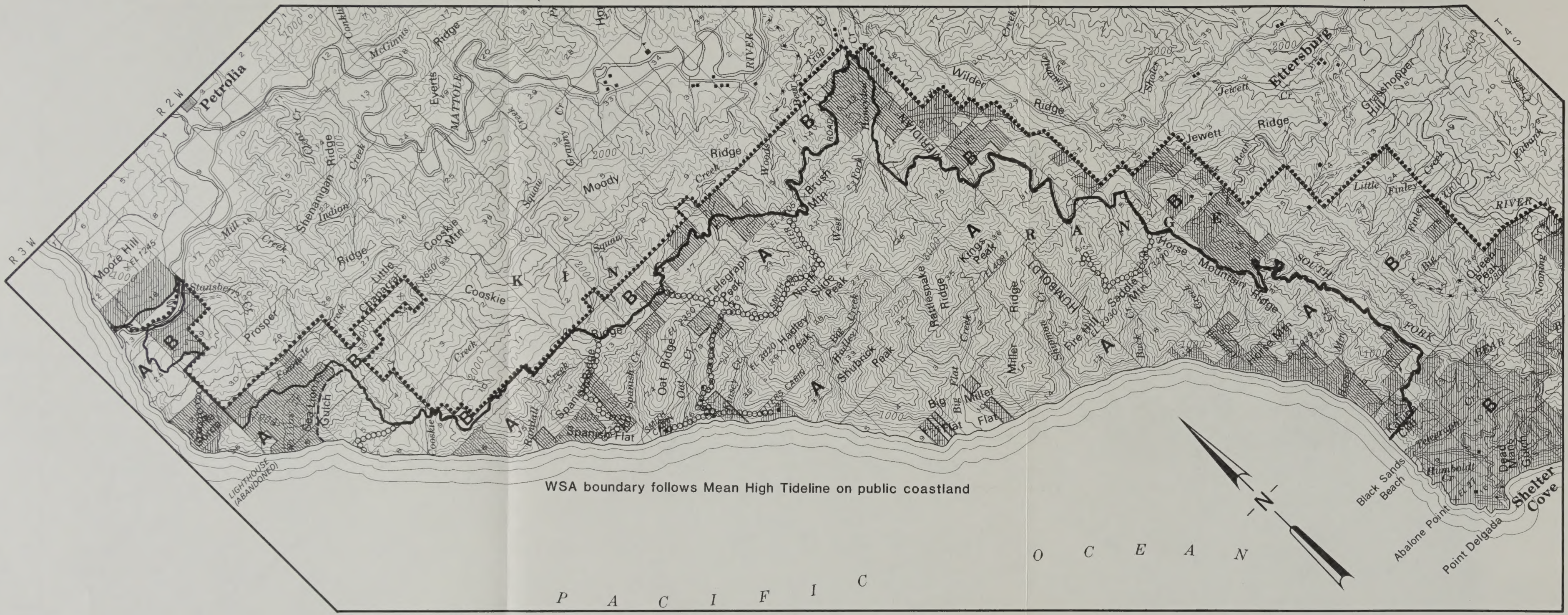
••••••••	King Range National Conservation Area boundary
— — —	WSA boundary
———	Suitable boundary
A	Suitable
B	Nonsuitable
∘∘∘∘∘∘∘∘	Access Corridors
	Private holdings within exterior WSA boundary not part of WSA
▨	Private surface and minerals (within KRNCA and at mouth of Mattole R.)
▥	Federal surface / Private mineral rights (within KRNCA and at mouth of Mattole R.)

Arcata Resource Area Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 1
All Wilderness

MAP 2-1



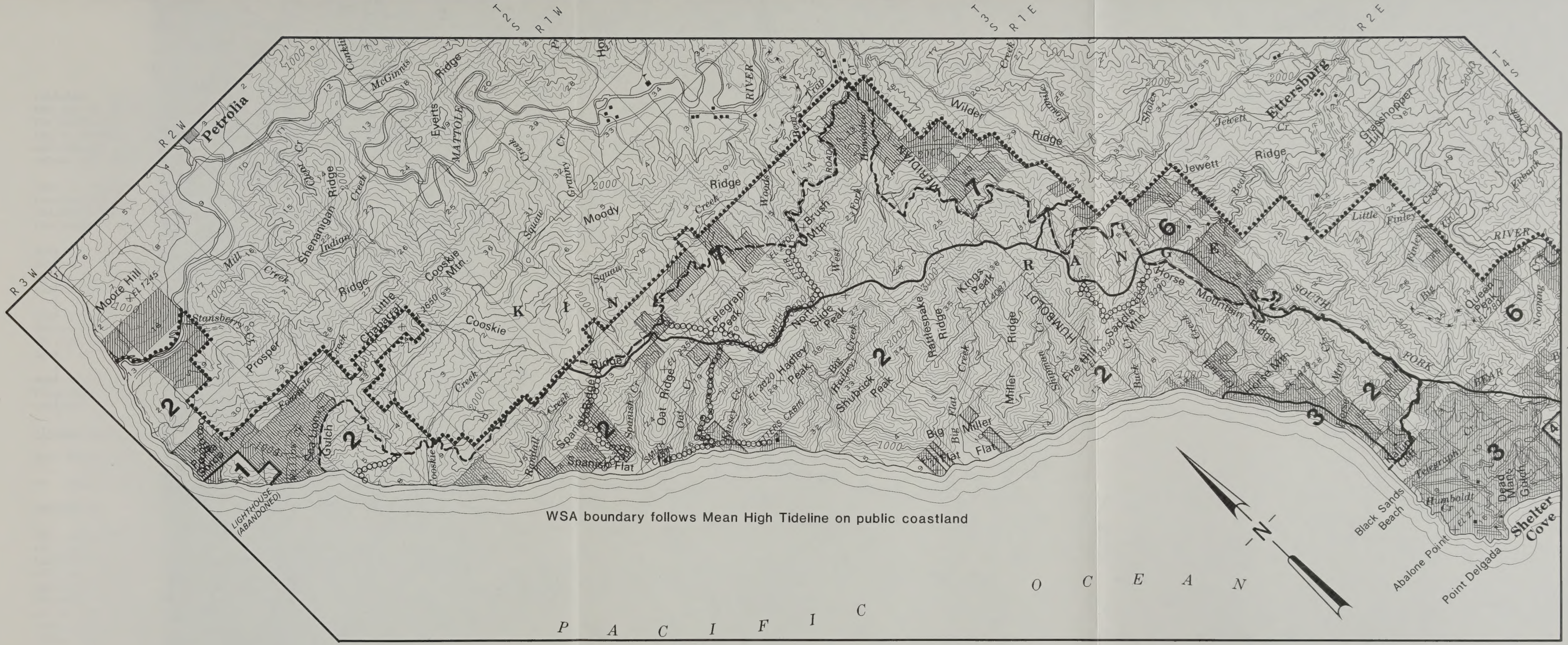
Scale: 3/4" = 1 Mile
Contour Interval: 200 Feet

Legend
- King Range National Conservation Area boundary
- WSA boundary
- Suitable boundary
- A Suitable
- B Nonsuitable
- Access Corridors
- Private holdings within exterior WSA boundary not part of WSA (within KRNCA and at mouth of Mattole R.)
  - ▨ Private surface and minerals
  - ▥ Federal surface / Private mineral rights

Arcata Resource Area
Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 2
All Wilderness Plus



Scale: 3/4" = 1 Mile
Contour Interval: 200 Feet

Legend

▪▪▪▪▪ King Range National Conservation Area boundary
— — — WSA boundary
5 Resource Management Zone
—— Zone boundary
○○○○○ Access Corridors
Private holdings within exterior WSA boundary not part of WSA
▨ Private surface and minerals (within KRNCA and at mouth of Mattole R.)
▥ Federal surface / Private mineral rights

Arcata Resource Area Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 3
No Action

MAP 2-3

vehicles. Parking and primitive facilities are provided on Spanish Flat at the end of the Smith-Etter Road. Motorized vehicles are be allowed only on the Smith-Etter Road, Telegraph Ridge Road, and Saddle Mountain Road. Grazing is allowed. Mining is regulated by the King Range Mining Regulations, and mineral activities are restricted to protect the primitive recreational values and unstable soils.

Zone 3 - Shelter Cove. Only a very small portion of this zone is within the inventoried WSA. The three miles of ocean beach area between Telegraph Creek and Gitchell Creek is within Zone 3. The land up to an existing way above the beach is open to motorized vehicle use.

Zone 6 - Bear Creek. The primary use of this zone is intensive timber production. The objective is to maximize timber production while managing the forest and other resources on a sustained yield basis. Only a very small sliver of this zone is within the inventoried WSA.

Zone 7 - Honeydew Creek. The primary use of this zone is wildlife habitat. The major objective is to preserve and enhance wildlife habitat with emphasis on sensitive species such as the spotted owl. The wildlife inventory for Zone 7 as required in the management program has not been completed.

More detailed descriptions of the zones are in the King Range Management Program, available for review in the Ukiah District and Arcata Resource Area offices.

Alternative 4 - Partial Wilderness (DAC)

Area Designation

-- Wilderness - 14,000 acres

Description

This alternative is the recommendation of the Ukiah District Advisory Council (Map 2-4). It is similar to the recommendation of the TRT. The northern boundary begins at mean high tide at Hadley Creek (Big Creek) easterly to the 200 foot contour line, northerly at the 200 foot elevation to Kinsey Creek, easterly up Kinsey Creek to within 50 feet of the Smith-Etter Road, easterly 50 feet from the road to the ridgecrest, southerly at either the ridgecrest or the King Crest Trail, whichever is the farthest west, to Saddle Mountain Road, then southerly along the WSA boundary to the South Fork of Gitchell Creek, thence to the mouth of Gitchell Creek.

The objective of this alternative is to allow vehicular access for camping in the stretch of beach between Hadley and Kinsey Creeks, and to provide flexibility in building firebreaks and access roads near the ridgetop.

This wilderness includes split estate under the authority of Section 202 of FLPMA and would be managed according to the Wilderness Management Policy and other authorities of the King Range Act. Livestock grazing would continue as established prior to designation and predator control would be allowed for those species that impact livestock operations either inside or outside the wilderness.

Nonwilderness areas within the King Range National Conservation Area would continue to be managed in accordance with the existing management plan.

Alternative 5 - Partial Wilderness (Proposed Action)

Area Designation

-- Wilderness - 21,200 acres

Description

The boundary is described as beginning at mean high tide at the mouth of Willow Creek (approximately one-half mile south of the Punta Gorda lighthouse), easterly up the creek to HJ Ridge, along HJ Ridge to the jeep trail on Johnny Jack Ridge, southerly along the jeep trail except at points where it leaves the King Range, at which point(s) the King Range boundary becomes the wilderness boundary, to the Telegraph Ridge Road, easterly along the Telegraph Ridge Road to the Smith-Etter Road, easterly and then southerly along Saddle Mountain Road to the South Fork of Gitchell Creek, westerly to mean high tide of the mouth of Gitchell Creek (Map 2-5).

The actual wilderness boundary would be 50 feet (horizontal distance) west of the centerline of the roads described as boundaries and 25 feet (horizontal distance) west of the centerline of the jeep trail and King Crest Trail described as boundaries, except at points where it is necessary for proper maintenance to exceed the prescribed distance from the centerline.

The objective of this alternative is to include as much of the coastal area as possible within the wilderness, while minimizing conflicts with other resource uses and human activities.

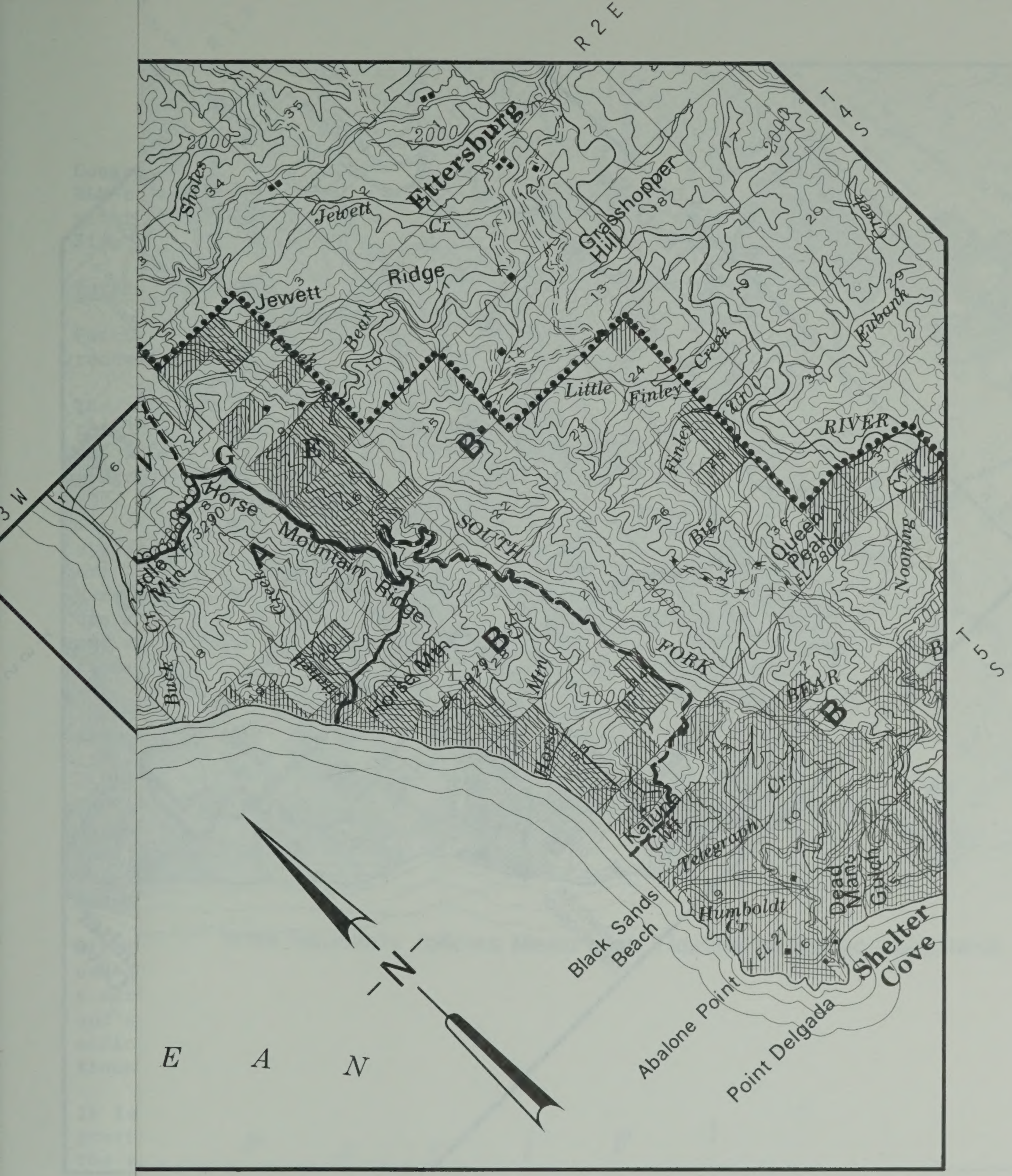
This wilderness includes split estate lands and would be managed according to the Wilderness Management Policy and other authorities of the King Range Act (See Alternative 1). Livestock grazing would continue as established prior to designation, and predator control would be allowed in the wilderness for those species that impact livestock operations either inside or outside the wilderness.

Nonwilderness areas within the King Range National Conservation Area would continue to be managed according to the existing management plan.

Summary of Manageability

A major factor affecting whether the King Range WSA can be managed as wilderness in the long term is the rights of private landowners to reasonable use of and access to their inholdings. Vehicular access to these parcels would degrade the sense of naturalness and solitude to a minor extent, but should not significantly affect the overall wilderness characteristics of the area.

The privately-owned mineral estate scattered throughout the WSA (as defined in several alternatives) has a very low potential for development, so should pose no manageability problems.



Arcata Resource Area
Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 4
Partial Wilderness (D.A.C.)

MAP
2-4

Nonwilderness areas within the King Range National Conservation Area would continue to be managed in accordance with the existing management plan.

Alternative 5 - Partial Wilderness (Proposed Action)

Area Designation

-- Wilderness - 21,200 acres

Description

The boundary is described as beginning at mean high tide at the mouth of Willow Creek (approximately one-half mile south of the Punta Gorda lighthouse), easterly up the creek to HJ Ridge, along HJ Ridge to the jeep trail on Johnny Jack Ridge, southerly along the jeep trail except at points where it leaves the King Range, at which point(s) the King Range boundary becomes the wilderness boundary, to the Telegraph Ridge Road, easterly along the Telegraph Ridge Road to the Smith-Etter Road, easterly and then southerly along Saddle Mountain Road to the South Fork of Gitchell Creek, westerly to mean high tide of the mouth of Gitchell Creek (Map 2-5).

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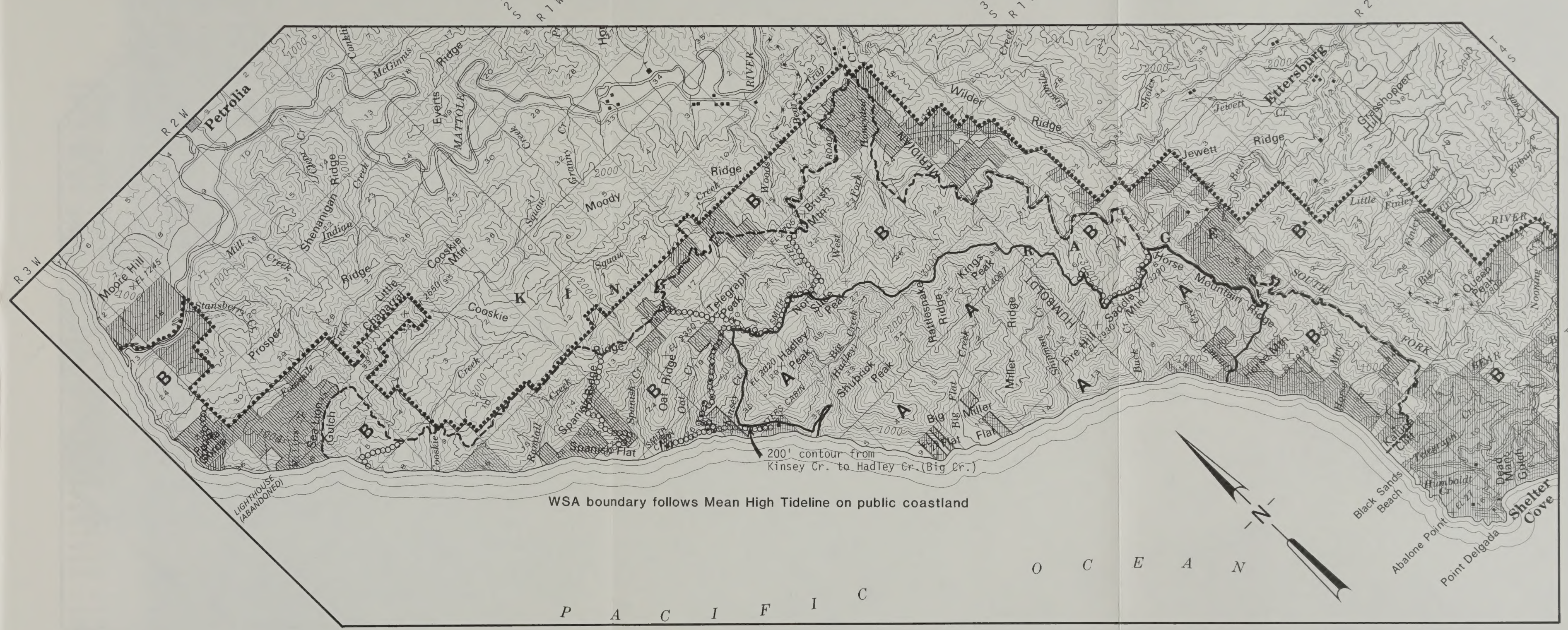
This wilderness includes split estate lands and would be managed according to the Wilderness Management Policy and other authorities of the King Range Act (See Alternative 1). Livestock grazing would continue as established prior to designation, and predator control would be allowed in the wilderness for those species that impact livestock operations either inside or outside the wilderness.

Nonwilderness areas within the King Range National Conservation Area would continue to be managed according to the existing management plan.

Summary of Manageability

A major factor affecting whether the King Range WSA can be managed as wilderness in the long term is the rights of private landowners to reasonable use of and access to their inholdings. Vehicular access to these parcels would degrade the sense of naturalness and solitude to a minor extent, but should not significantly affect the overall wilderness characteristics of the area.

The privately-owned mineral estate scattered throughout the WSA (as defined in several alternatives) has a very low potential for development, so should pose no manageability problems.



Scale: 3/4" = 1 Mile
Contour Interval: 200 Feet

Legend

●●●●●●●●	King Range National Conservation Area boundary
— — —	WSA boundary
———	Suitable boundary
A	Suitable
B	Nonsuitable
○○○○○○	Access Corridors
	Private holdings within exterior WSA boundary not part of WSA
▨	Private surface and minerals (within KRNCA and at mouth of Mattole R.)
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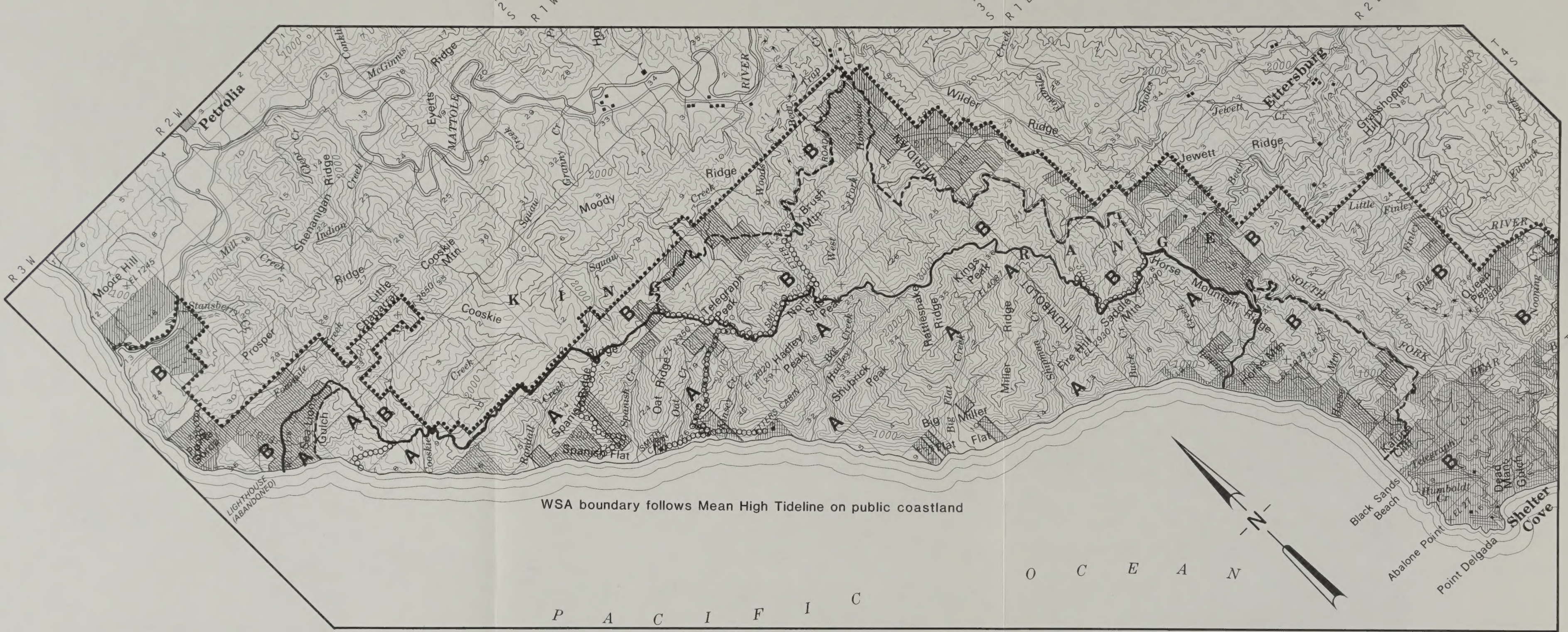
Arcata Resource Area Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 4
Partial Wilderness (D.A.C.)

MAP 2-4



Scale: 3/4" = 1 Mile
Contour Interval: 200 Feet

Legend

King Range National Conservation Area boundary
WSA boundary
Suitable boundary
A Suitable
B Nonsuitable
Access Corridors
Private holdings within exterior WSA boundary not part of WSA
▨ Private surface and minerals
▥ Federal surface / Private mineral rights
(within KRNCA and at mouth of Mattole R.)

Arcata Resource Area
Wilderness Study

CA-050-112
KING RANGE

ALTERNATIVE 5
Partial Wilderness - Proposed Action

MAP 2-5

Congress, through the King Range Act, gave the power of eminent domain to the BLM to be able to manage both public and, to a certain extent, private land within the National Conservation Area. This power all but ensures that a King Range wilderness would be manageable.

Bureau of Land Management's Preliminary Wilderness Recommendation

Partial wilderness of 21,200 acres, as described under Alternative 5, is the recommended management program.

The relatively undisturbed coast along the King Range is very unique, and this recommendation includes about 17 miles of coastline. King Range would add diversity to the National Wilderness Preservation System and balance the geographic distribution of Federally-administered wilderness areas.

The quality of the mandatory wilderness characteristics (naturalness and outstanding opportunities for solitude or primitive and unconfined recreation) are high due to the rugged topograpy, isolation, and size of the King Range. Human impacts within the area, such as past logging and existing livestock operations, do not significantly affect the overall feeling of naturalness and are not generally noticable from the beach where the majority of recreational use occurs.

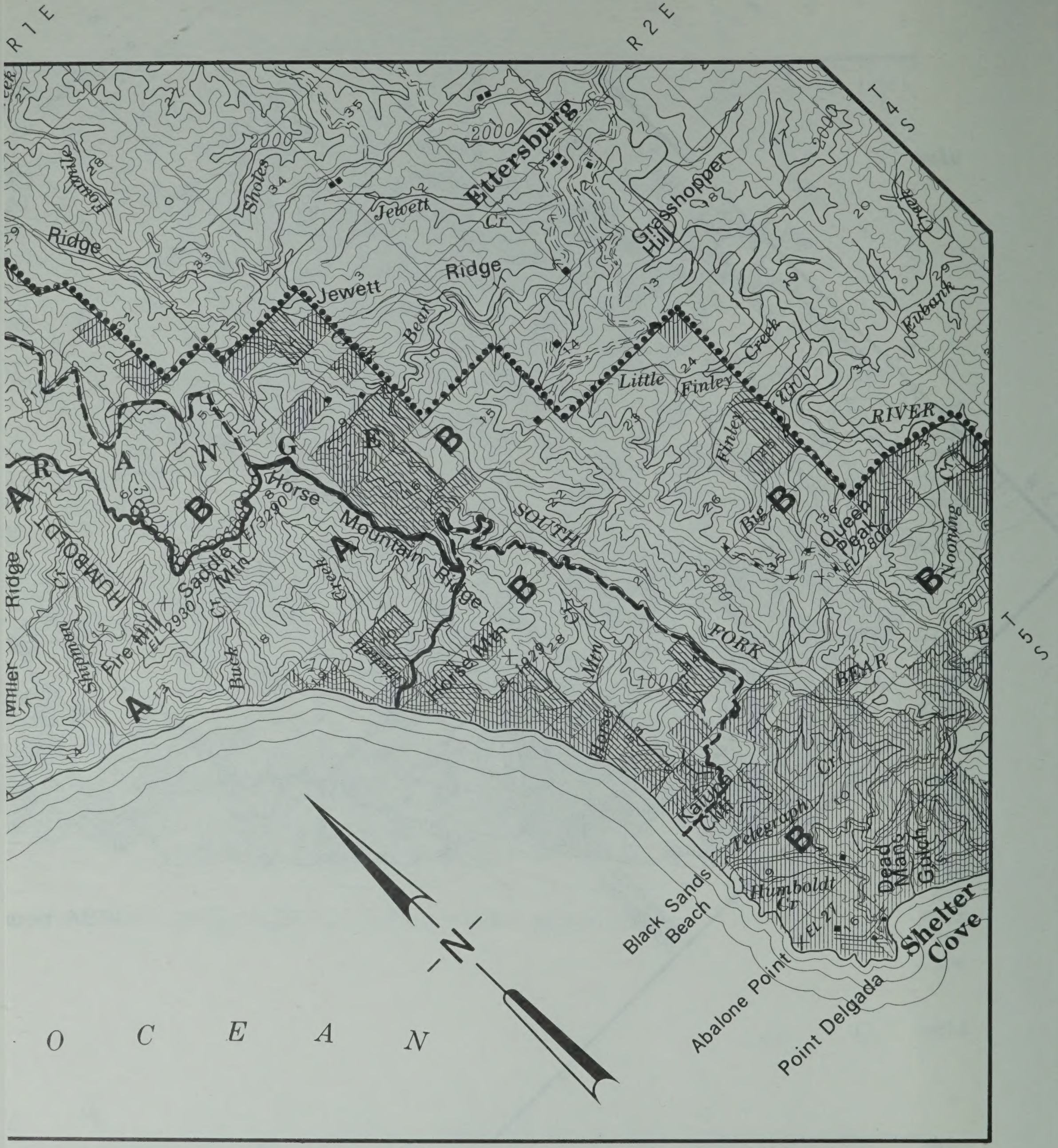
The entire area is in Zone 2 of the existing management plan, so there are no significant resources or uses that would be affected by wilderness designation.

The area east of the ridgeline is not included in this wilderness recommendation because it is not as unique as the coastline and has large areas that have been logged and significantly impact the feeling of naturalness. Also, the roads and trails are easily recognizable boundaries on or near a topographic break.

Gitchell Creek is a natural boundary which eliminates conflicts with vehicle use on the beach between Gitchell Creek and Telegraph Creek. Willow Creek is a natural boundary which excludes from wilderness the Punta Gorda lighthouse and some existing ranching facilities. This eliminates these relatively significant human disturbances and provides flexibility in providing recreational facilities near the mouth of the Mattole River.

It is the intention of the Bureau of Land Management to keep the option of providing vehicular access for public and/or administrative uses by means of the access corridors identified on the alternative maps. Identification of precise uses would require further analysis of need, watershed considerations, and maintenance feasibility in the Wilderness Management Plan.

One final point of this recommendation is to ensure that livestock operations on public and private land are not unduly impacted by predators within the wilderness area, and that efficient, reasonable, predator control will be allowed even if such control may technically conflict with the guidelines in the Wilderness Management Policy.



Arcata Resource Area
Wilderness Study

CA-050-112
KING RANGE

of WSA
KRNCA and at)
f Mattole R.)

ALTERNATIVE 5
Partial Wilderness - Proposed Action

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CHEMISE MOUNTAIN WILDERNESS STUDY AREA (CA-050-111)

Alternative 1 - All Wilderness

Area Designation

-- Wilderness - 4,300 acres

Description

Under this alternative the entire Chemise Mountain WSA (Map 2-6) would be designated wilderness and managed according to the Wilderness Management Policy. The designation as a Primitive Area would formally be dropped.

The wilderness area does not include the developments of the Nadelos and Wailaki campgrounds which would continue to be used as designed.

Alternative 2 - No Action (Proposed Action)

Area Designation

-- Wilderness - 0 acres

Description

Under this alternative the entire Chemise Mountain WSA would be managed as a Primitive Area as described in the King Range Management Program for Zone 4. This would require inclusion of newly acquired land into the Primitive Area (Map 2-7).

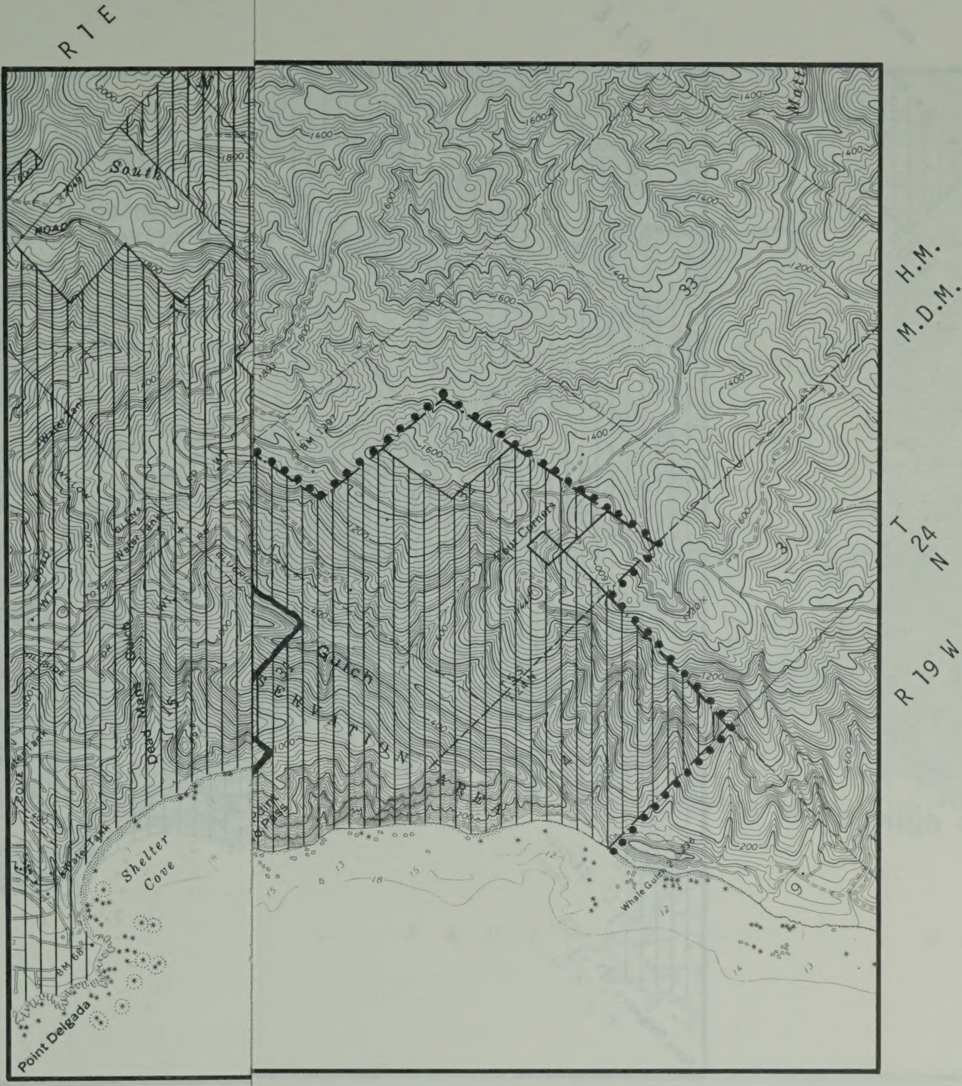
The primary use of this zone is recreation. The major objective is to preserve the primitive qualities of the area. This area would be managed to provide opportunities for solitude. Extensive recreation such as hiking and primitive camping would be encouraged, but no camping facilities would be provided within the zone. The trail system would be connected to the trails within the adjacent Sinkyone State Wilderness Park. Self-guided interpretive walks would be developed between the campgrounds and the Chemise Mountain trails.

No logging is permitted. Limited actions to control insects or disease may be allowed if commercial forestlands are threatened and the action does not significantly detract from the primitive qualities of the zone.

Development of minerals involving surface disturbance is not compatible with the maintenance of primitive values in this zone. Any developments which risk degradation of natural values would not be permitted. However, the zone is not withdrawn from entry under the mining laws.

Summary of Manageability

There are no resource conflicts or nonconforming uses within the Chemise Mountain WSA that would have a potential impact on preservation of the area's wilderness character. The WSA could be managed as wilderness over the long term based on present knowledge of the resources and potential visitor uses.



Arcata Resource Area
Wilderness Study

CA-050-111
CHEMISE MOUNTAIN

Scale: 2" = 1 Mi
Contour Interval:

ALTERNATIVE 1
All Wilderness

MAP 2-6

CHEMISE MOUNTAIN WILDERNESS STUDY AREA (CA-050-111)

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Area Designation

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Area Designation

-- Wilderness - 0 acres

Description

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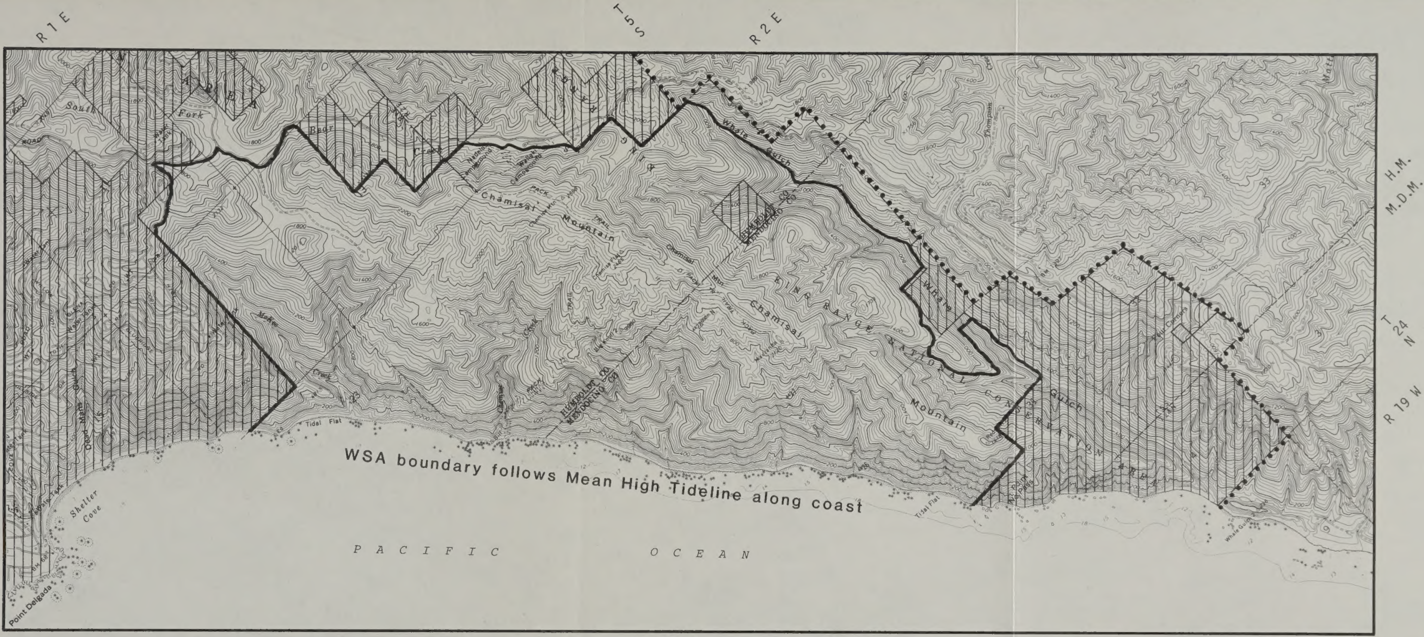


Scale: 2" = 1 Mile
Contour Interval: 40 Feet

Legend

●●●● King Range National Conservation Area boundary

── WSA boundary and Suitable boundary

Entire WSA Suitable under this Alternative.

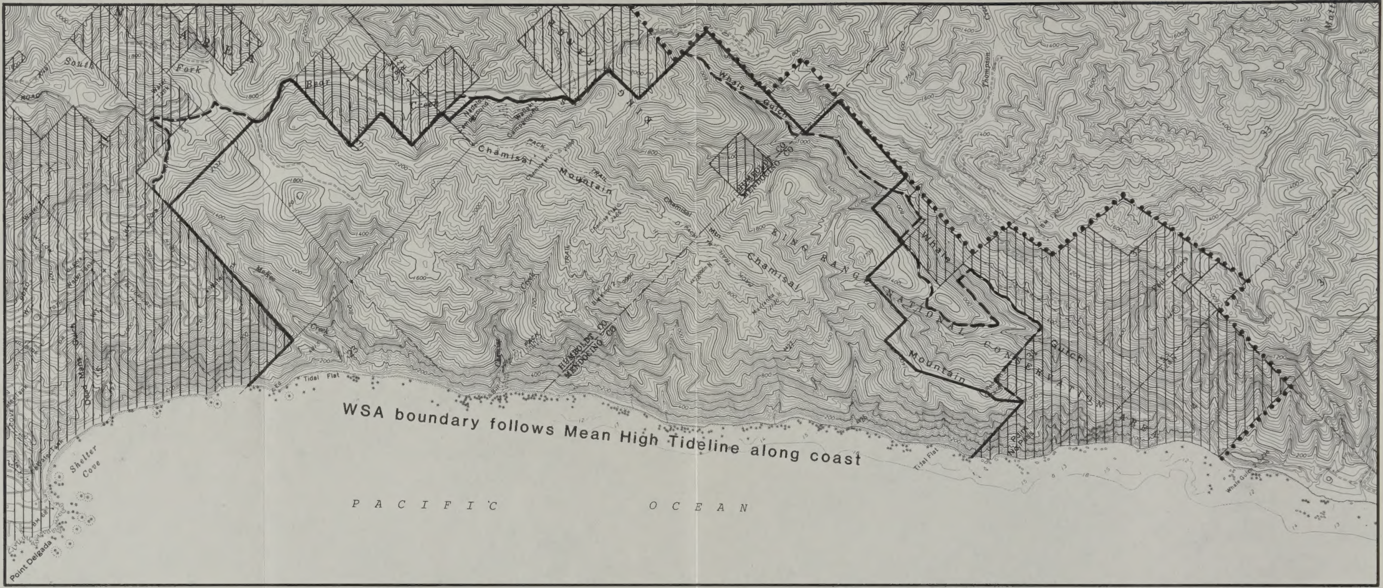
▨ Private Land within K.R.N.C.A.
(Private land within exterior boundary of WSA not part of WSA)

Arcata Resource Area
Wilderness Study

CA-050-111
CHEMISE MOUNTAIN

ALTERNATIVE 1
All Wilderness

MAP 2-6



Scale: 2" = 1 Mile
Contour Interval: 40 Feet

N

Legend

- ••••• King Range National Conservation Area boundary
- – – – WSA boundary
- ▨ Entire WSA Nonsuitable under this Alternative.
- ▨ Private Land within K.R.N.C.A. (Private land within exterior boundary of WSA not part of WSA)
- ─── Primitive Area boundary

Arcata Resource Area
Wilderness Study

CA-050-111
CHEMISE MOUNTAIN

ALTERNATIVE 2
No Action
(Primitive Area)
Proposed Action

MAP 2-7

Bureau of Land Management's Preliminary Wilderness Recommendation

The Bureau of Land Management's preliminary wilderness recommendation is to continue the present primitive area designation and management prescription and not to designate Chemise Mountain as wilderness.

In reaching this conclusion, BLM considered (1) the proximity of Chemise Mountain to the Shelter Cove subdivision (a paved residential road is actually part of the WSA boundary); (2) that the sights and sounds of private lands to the east significantly impact the feeling of solitude; (3) that the intent of wilderness is similar to the primitive area designation; and (4) that the opportunities for primitive or unconfined recreation are limited due to the small size, steep slopes, and dense vegetation, which hinder the dispersal of users and confine them to a few trails.

Primitive area status would continue to preserve the existing natural values without having to meet the stricter mandatory requirements of wilderness designation.

Table 2-1

Comparison of Impacts by Alternative

KING RANGE WSA

Resource/Value	Alternative 1 All Wilderness	Alternative 2 All Wilderness-Plus	Alternative 3 No Action	Alternative 4 Partial Wilderness	Alternative 5 Partial Wilderness Proposed Action
Wilderness Values	Wilderness values legislatively protected on 29,300 acres, and administratively protected in Zones 1 and 2 on 5,300 acres under King Range Management Program. Total area protected: 34,600 acres.	Wilderness values legislatively protected on 32,900 acres, and administratively protected in Zone 2 on 1,700 acres. Total area protected: 34,600 acres.	Wilderness values such as primitive recreation and solitude are administratively protected in Zones 1 and 2 under the King Range Management Program. Total area protected: 27,500 acres.	Wilderness values legislatively protected on 14,000 acres, and administratively protected in Zones 1 and 2 on 13,500 acres. Total protected area: 27,500 acres.	Wilderness values legislatively protected on 21,200 acres, and administratively protected on 6,300 acres in Zones 1 and 2. Total protected area: 27,500 acres.
Manageability	Wilderness would be manageable because of low mineral potential on split-estate, large size, juxtaposition to Federal land, and right of eminent doman under authority of King Range Act.	Same as Alternative 1.	N/A.	Same as Alternative 1.	Same as Alternative 1.
Cultural Resources	Minor benefit to cultural resources because of prohibitions on timber harvest and road construction in Zones 6 and 7. Most significant cultural resources are along the beach in Zones 1 and 2 where surface disturbing activities are restricted under King Range Management Program.	Same as Alternative 1.	Cultural resources in Zones 6 and 7 could be adversely impacted by logging and road construction. Significance of cultural resources in these zones is relatively low.	Same as Alternative 3.	Same as Alternative 3.
Recreation	Vehicular access would be somewhat restricted as roads and ways are closed. This is not significant as access to Spanish Flat will be maintained and many of the existing roads and ways have not provided access to the general public until very recently. Opportunities for primitive recreation and solitude will be enhanced.	Same as Alternative 1.	Sames as Alternative 1 for Zones 1 and 2. Road construction for logging proposed in Zones 6 and 7 will provide a minor amount of additional roads for vehicular access.	Same as Alternative 3.	Same as Alternative 3.

Resource/Value	Alternative 1 All Wilderness	Alternative 2 All Wilderness-Plus	Alternative 3 No Action	Alternative 4 Partial Wilderness	Alternative 5 Partial Wilderness Proposed Action
Visual Resources	Visual Resource values in wilderness managed in accordance with wilderness management guidelines. Class I objectives (no evident changes permitted) used to assess developments. Area has high regional scenic values.	Same as Alternative 1.	Zones 1 and 2 managed under VRM Class II - values will be protected and enhanced. Zones 6 7 will be managed under VRM Class III (changes may be evident but should remain subordinate to the landscape). Logging and road construction will reduce visual values but will be in accordance with Class III objectives.	Same as Alternative 1. for wilderness and Aletrnative 3 for other zones.	Same as Alternative 1 for wilderness and Alternative 3 for other zones.
Timber Resources	Timber management prohibited on 6,500 acres of identified commercial forest land, with a loss of standing volume of 60,000 MBF. This is 26% of the total available commercial forest land within the King Range National Conservation Area, and 54% of the standing volume.	Same as Alternative 1.	No affect on timber management.	No affect on timber management.	No effect on timber management.
Vegetation	Negligible beneficial impacts. Provides representation of biological diversity to wilderness system.	Same as Alternative 1.	Negligible impacts because of logging and road construction in Zones 6 and 7.	Sames as Alternative 3. Provides representation of biological diversity to wilderness system.	Same as Alternative 3. Provides representation of biological diversity to wilderness system.
Soils and Watershed Resources	Would protect watershed in Zones 6 and 7 from potential erosion and siltation from logging activities.	Same as Alternative 1.	Minor damage to soils and watershed would result from logging activities, however, general thrust of King Range Management Program is to restore severely damaged watersheds.	Same as Alternative 3.	Same as Alternative 3.
Wildlife	Sensitive animal species would benefit to a small degree because of prohibition on logging in portions of Zones 6 and 7. There may be some minor restrictions on the specific type of habitat manipulation, but should pose no significant problems.	Same as Alternative 1.	Wildlife is the primary resource consideration in Zone 7, and wildlife benefits from the primitive recreational use of the west slope. The greatest adverse impact to wildlife would be logging and road construction in Zone 6, and this is a very small consideration vis-a-vis wilderness.	Same as Alternative 3.	Same as Alternative 3.

Resource/Value	Alternative 1 All Wilderness	Alternative 2 All Wilderness-Plus	Alternative 3 No Action	Alternative 4 Partial Wilderness	Alternative 5 Partial Wilderness Proposed Action
Minerals and Energy Resources	No Impacts. Potential exploitable resources are nonexistant.	No Impacts	No Impacts	No Impacts	No Impacts
Livestock Grazing	No impacts. Grazing will continue as established prior to wilderness designation. Predator control may be marginally more difficult because of requirements of wilderness management policy	No Impacts	Grazing is long established use recognized in the King Range Management Program. Grazing has reached its economical potential.	No Impacts	No Impacts
Consistency with Local Land Use Plans	Consistent with local plans.	Consistent with local plans.	Consistent with local plans.	Consistent with local plans.	Consistent with local plans.
Socioeconomics	No significant impacts. Slight increase in visitor use which will fluctuate according to season and publicity efforts.	Same as Alternative 1.	Local use by hunters but majority of other recreational use (hiking, camping) is from users who live more than four hours hours from the King Range. This is similar to tourist impact that could be expected near wilderness area.	Same as Alternative 1.	Same as Alternative 1.

Table 2-2

Comparison of Impacts by Alternatives

Chemise Mountain WSA

Resource/Values	Alternative 1 All Wilderness	Alternative 2 No Action
Wilderness Values	Wilderness Values legislatively protected on 4,300 acres.	Wilderness values administratively protected on 4,300 acres in designated Primitive Area.
Manageability	Wilderness would be manageable because of low resource potential and right of eminent domain under authority of King Range Act.	
Cultural Resoures	Negligible. Very low sensitivity.	Same as Alternative 1
Recreation	No Impact	No Impact
Visual Resources	Visual resource values managed in accordance with wilderness guidelines VRM Class I objectives (no evident changes permitted) used to assess developments. Area has high regional scenic value. No impact.	Visual resource values managed in accordance with VRM Class II objectives (changes do not attract attention). No impact.
Timber Resources	No significant impact. No available commercial forest land in area. Negligible standing volume exists on about 700 acres of capable forest land.	Same as Alternative 1.
Vegetation	No impact. Will add ecological diversity to wilderness system.	No Impact
Soils and Watershed Resources	No Impact	No Impact
Wildlife	No Impact	No Impact
Minerals and Energy	No Impact	No Impact

Resource/Values	Alternative 1 All Wilderness	Alternative 2 No Action
Livestock Grazing	No impact. There is little grazing potential and no historical livestock use.	Same as Alternative 1.
Consistency with Local Land Use Plans	Consistent with local plans.	Consistent with local plans.
Socioeconomics	No significant impacts. Slight increase in visitor use which will fluctuate according to season and publicity efforts.	Same use by local hunters, but majority of other recreational users live more than four hours from the King Range. This is similar to tourist impact that could be expected near a wilderness area.

CHAPTER 3

AFFECTED ENVIRONMENT

INTRODUCTION

This chapter briefly describes each WSA and the resources that would be impacted by the alternatives including the proposed action. Descriptions are only as detailed as needed for the reader to understand the effects of implementing the alternatives. Where impacts to resources would be slight or nonexistent, descriptions are brief or are omitted.

More detailed descriptions of the resources in the study area and of regional socioeconomic conditions appear in the planning documents for the planning area. Copies of these documents may be reviewed in the Ukiah District Office or the Arcata Resource Area Office.

KING RANGE WSA

MANDATORY WILDERNESS CHARACTERISTICS

Naturalness

Man's imprint on the landscape in this WSA is evidenced by roads totaling approximately 25 miles, nearly 10 miles of vehicle routes that are not mechanically maintained, past logging operations, cattle and sheep grazing, corrals, barns, and residential cabins located along the beach.

The locations of the areas which are subject to man's imprint are concentrated toward the northen half of the WSA. The impact of these intrusions are relatively small and substantially unnoticeable due to terrain variety and sheer distance. Man's imprint is particularly noticeable in the Big Flat area due to residential structures and an airstrip.

The potential for separating impacted portions from the rest of the WSA is good. The most natural areas are those watersheds on the west slope south of Cooskie Creek and north of Gitchell Creek, and the Honeydew Creek watershed on the east slope.

Opportunities for Solitude or Primitive and Unconfined Recreation

Solitude

The large size, rugged topography, and dense vegetation offer an excellent degree of visual screening, thus enhancing opportunities for visitors to find solitude within the WSA. The presence of sights and sounds outside the southern and northeastern boundaries intrude upon portions of the WSA and diminish the opportunities for solitude. Existing authorized use of motor vehicles on the beach from Gitchell Creek to the southern boundary of the WSA (by both private owners and the public) reduces opportunities for solitude.

Primitive and Unconfined Recreation

The King Range WSA provides outstanding opportunities for primitive and unconfined recreation. The network of trails, roads, and beach access offer opportunities for very diverse types of recreation over a large area. The King Range beach is one of the few publicly owned ocean beaches along the California coast and has opportunities for hiking, camping, surf fishing, sightseeing, and other forms of dispersed recreation.

DIVERSTIY IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM

Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems and Landforms

The Bailey-Kuchler (see references cited) designation of the vegetation for the King Range WSA is "Pacific Forest Province - California Mixed Evergreen Forest." More specifically, the WSA is comprised of "mixed evergreen forest with rhododendron" and "coastal prairie-scrub mosaic." Addition of King Range WSA to the Wilderness Preservation System would expand the diversity within the system because there are no rugged coastal wilderness areas with this general vegetation type.

Assessing the Opportunities for Solitude or Primitive Recreation Within a Day's Drive of Major Population Centers

There are 20 designated wilderness areas and 12 wilderness study areas within one day's drive (5 hours driving time) of the standard metropolitan statistical areas (SMSAs) from the King Range WSA.

Balancing the Geographic Distribution of Wilderness Areas

The coast range of northern California (i.e., the area north of San Francisco and west of the Sacramento Valley) has five established wilderness areas and six BLM WSAs. Most of these areas are in the northern part of the Coast Range.

SPECIAL FEATURES

Geomorphology

The King Range is an area that is a case study of erosional dynamics. The severe and persistent erosion includes dissection due to youthful, steep gradient coastal streams and mass wasting, e.g., numerous slumps and slides. The primary reason for such widespread erosion is the orogenic uplift of this section of coastline due to tectonic movement. The study area is located on the leading edge of the North American (continental) plate. As the plate moves westerly, it grinds over the Pacific plate intensively fracturing the bedrock as it lifts skyward. The crushed, steep King Range is subsequently eroded by gravity and the power of running water. High annual rainfall and the incessant gnawing of the Pacific Ocean exacerbate the problem.

Paradoxically, the same set of erosional parameters has preserved some unusual and scientifically valuable features. Along this coastline earlier wave cut terraces can be identified. The terraces have been preserved by episodic uplift. A recent uplift has been noted on Miller Flat immediately south of Big Flat Creek. Boulders which once spewed into the ocean from Big Flat Creek now trace a former beach edge well above the reach of the ocean. Radiocarbon age dating reveals that the shoreline has risen some 66 feet over the last 6,000 years. Similarly, boulders and cobbles which once formed a rocky beach are preserved in a coastal bluff near Sea Lion Gulch, capped by a prehistoric landslide replete with logs and other flora of the former hillside.

Cultural Resources

The study area as a whole has been the focus of several field investigations for cultural (principally prehistoric) resources (Fredrickson 1975; Levulett, 1976a and 1976b, 1979, 1981a, 1981b, and 1982). The information provided in these reports when taken into consideration with more regional works (Hildebrandt 1981, Levulett 1977) and recent studies (Roscoe 1983) indicates that the coastal strip specifically contains prehistoric archaeological values of national significance.

A minimum of 45 prehistoric sites containing one or more discrete loci and ranging in size from 540 square feet to six acres have been recorded within the coastal strip of the study area. Collectively, these sites chronicle the entire spectrum of material-oriented aboriginal activity over the last 3,000 years. The assemblage is unique as it reflects an area, which at least in the later prehistoric period, fills a niche spanning Northwest Coast cultural adaptations (e.g., ocean going canoes, intensive sea mammal exploitation, and a relatively high reliance on elk) and the more generalized foraging adaptations of the California cultural province (Hildebrandt, 1981: 187-193).

Not surprisingly, the area also exhibits interfaces beyond the material culture. The presence of obsidian from northeastern California and from the Lake County area to the south indicates trade and, by inference, some affinity to their Athabascan relatives or ancestry Yukian and Hokan/Siouan, i.e., Pomo, neighbors respectively. Sufficient data exist within the archaeological deposits to assess these ethnographic relationships as well as earlier aboriginal adaptations, relationships, and movements.

The study area, due to its remote location, offers an opportunity unparalleled in California (if not the west coast) to interpret coastal prehistory due to the relatively high degree of preservation. Generally, coastal archaeological sites possess better preservation of organic, especially fauna, materials than inland sites. The subject prehistoric sites contain terrestrial as well as marine fauna information and, when coupled with the high level of impacts to coastal archaeological sites elsewhere due to modern development, reinforce the significance or rarity of the assemblage. Moreover, the relative antiquity of these coastal sites (at least 3,000 years) surpasses most known coastal northern California archaeological sites and presents an enigma, i.e., relative stability, in a geomorphologically active area. These factors add considerably to the intrinsic scientific and heritage values.

Historic, i.e., American period, features consist of the concrete and steel remains of the Punta Gorda lighthouse and oil house as well as a few Pre-WWII cabins, sheds, and corrals used until recently by range operators. The Punta Gorda lighthouse, an entry on the National Register of Historic Places, now stands in silent witness to the thriving and sometimes treacherous maritime trade which once plied the coast of northern California. The various features including numerous dilapidated fences which relate to use of the range are generally features of the cultural landscape which add character but not additional significance to the study area.

OTHER RESOURCE VALUES

Recreation

The western slope of the King Range is generally steep and rough, creating a highly difficult terrain for hikers. Ridgetops and some fairly level open areas in the more northerly portions of the WSA provide the best foot access.

Recreation use is largely confined to late spring, summer, and early fall seasons due to the rainy and windy conditions which typify much of the area during the winter.

General recreation activities consist of hiking, backpacking, hunting, fishing (surf and stream), wildlife viewing, nature study and photography. Roads, some well defined, provide motorized access along the eastern and northern portions of the WSA. The beach is closed to motorized vehicles from Gitchell Creek north to the mouth of the Mattole. The 16-mile King Crest Trail provides foot and horse access along the main coastal ridge north of Shelter Cove.

Hunting pressure is greatest in the north one-third of the WSA during the regular deer season. There is only occasional hunting for other game animals and birds. While recent acquisitions have made more land available for hunting purposes, reservations on access restrict public use.

Use of the beach within the WSA is by foot only. The approximately 21 miles of beach closed to motorized access affords the hiker/backpacker/angler the opportunity for a primitive, yet fairly accessible physical setting.

Visual Resources

The King Range represents a landscape diversity rare and unique. Rising from a coastline of massive rocks, cliffs, tide pools and beaches to rugged mountains exceeding 4,000 feet in elevation in less than three miles gives credence to its claim as the "Lost Coast." The landscape itself takes on a variety of characteristics.

To the north, the King Range is bounded by the estuary of the Mattole River. This broad river plain meets the coastline at a large sandy beach that extends south to the historic Punta Gorda lighthouse. Along this coastline the cliffs and hillsides rise abruptly and are sharply dissected by numerous drainages. The upslope areas are generally grass covered to the north with coastal chaparral and Douglas-fir in the drainages. Progressing southward this western slope of the study area is dominated by Douglas-fir and other mixed conifers rising to the ridge crest of Kings Peak. Several coastal terraces break the rugged coastline at Spanish Flat, Big Flat, and Miller Flat. Here broad, grassy flats extend to the beaches. The southern boundary of the study area is just above Telegraph Creek and the area known as Black Sands Beach. Here the beaches are covered with black sand and gravel giving the beach a very dramatic appearance.

The inland, east slope is typical of the coastal range. This area is composed of mixed conifer forests, tanoaks and madrones, as well as a rich diversity of riparian species in the drainages. The overall sense of this portion of the study area is that of dense forested slopes steeply rising to the crest of the King Range.

The area has long been recognized as one of the most unique and scenic stretches of the California coastline. The rugged and remote landscape has seen few intrusions. Roads are limited in this area, and only a few ranch cabins occupy the coastline. In the Four Mile Creek and Sea Lion Gulch drainages and along the west slope, skid trails and stump fields are reminders of past logging activities. The east slope supports more conifers and has seen a greater amount of timber harvest, but is still limited by the steep terrain.

The BLM's Visual Resource Management (VRM) system rates this as a landscape of high scenic quality along the coastline and the Mattole River Valley. The upland areas are only slightly less distinctive and overall are rated as Moderate to High scenic quality. The area's remoteness limits viewing to the recreational users who wander the beaches and trails and to local residents. These viewers all maintain a high degree of sensitivity towards this unique coastal range. Views range from the intimate foreground to the background of splendid vistas. Views into the area are afforded from only two county roads, Wilder Ridge Road and Shelter Cove Road, and the Shelter Cove community.

The VRM system establishes management classes that set various standards for maintaining the Visual Resource. The entire coastline is designated VRM Class 2, which precludes management activities from being evident in the characteristic landscape. THe Mattole River Valley and the east slope upland are managed as VRM Class 3, which allows management activities to be visible but they must remain subordinate to the existing landscape.

Timber Resources

The King Range National Conservation Area (KRNCA) is a rugged, isolated brush and timber covered mountain range in Northern California. The present condition of the Commercial Forest Land (CFL) is mainly one of neglect. Wildfires have been the controlling factor, allowing hardwood/brush to compete successfully with the Douglas-fir for control of the various sites.

Timberlands on the west side of the King Range are relatively undisturbed due to the steep terrain and general lack of access. There are approximately 12,000 acres of CFL on this side. The eastern slope is not as steep as the west slope and contains several areas that are producing good quality commercial timber. The east side contains approximately 25,000 acres of Commercial Forest Land (CFL) with about half of it in a cutover condition.

Douglas-fir is the major commercial species, with sugar pine scattered at the higher elevations. Tanoak, madrone and alder make up the majority of the hardwood component. Fir reproduction is evident throughout the area, although hardwood brush dominates a large portion of the total King Range unit.

Due to the topography, climatic factors, and general vegetative cover the KRNCA is divided into seven management zones. The timberlands in Zones 1 through 5 (west side) are classified for protective management compatible with wildlife, recreation, and visual resources. The timberlands in Zones 6 and 7 (east side) are intended for intensive timber management. It is these two zones in which the wilderness designation would have an impact on the management of the timber resources in Sustained Yield Unit 8 (SYU-8) of the KRNCA.

The majority of the CFL identified for timber production in the King Range National Conservation Area is in Zone 6. The inventoried wilderness study area includes the extreme northern portion of Zone 6 and about half of Zone 7.

The acreage and standing volume of available commercial forestland within the inventoried WSA is 6,500 acres with 60,000 MBF. This represents 26 percent of the total available CFL within the King Range NCA and about 54 percent of the standing volume.

Vegetation

Broadly speaking, the King Range Wilderness Study Area (WSA) falls within the Pseudotsuga menziesii province of the temperate mesophytic forest region (Daubenmire, 1978). Specifically, the WSA is composed of four plant communities: mixed evergreen forest, coastal prairie, manzanita/ceanothus chaparral and northern coastal scrub (Barbour and Majors, 1977). In addition, there is the Mattole dune system at the mouth of the Mattole River.

The vast majority of the WSA (23,000 acres) is dominated by the mixed evergreen forest, inclusive of its hardwood seral stages. It is best described as the north coast range phase of the Pseudotsuga - hardwood forest (Sawyer et al. 1977). This plant community forms a very complicated vegetation mosaic with the coastal prairie to the north and west and manzanita/ceanothus chaparral on the more xeric sites to the south and east. Though the nature of the grassland-hardwood-conifer mosaic is not well understood, it is known that it has been shaped by a long history of fire, grazing and, more recently, logging. This is in addition to the more mundane causal agents of climate and topography.

Douglas-fir (Pseudotsuga menziesii) dominates the overstory in the climax situation with tanoak (Lithocarpus densiflora) commonly forming a secondary canopy in the understory. Other understory species include madrone (Arbutus menziesii), deciduous and live oaks (Quercus spp.) and California huckleberry (Vaccinium ovatum). Barrows et al. (1983) reported a typical successional overview in Honeydew Creek watershed showing old-growth Douglas-fir in the drainages and north slopes with an elevational transition through tanoak and madrone and finally progressing to a ridgetop community of manzanita (Arctostaphylos spp.).

The coastal prairie (about 4,000 acres) is an important component of the King Range WSA. It is complex due to the varying degrees of successional transition away from its pristine state. In the extreme northwest, the bluffs above the mouth of the Mattole River support a mix of native perennial grasses such as California oatgrass (Danthonia californica), seacliff bluegrass (Poa unilateralis), and pacific reedgrass (Calamagrostis nutkaensis), as well as introduced perennials (e.g., velvet grass, Holcus lanatus, and hairy oatgrass, Danthonia pilosa) and introduced annual genera common throughout cismontane California (e.g., Bromus, Festuca, and Cynosurus).

The coastal prairie continues along the western slope of the King Range to Big Flat as a discontinuous mosaic periodically interrupted by northern coastal scrub (e.g., coyote brush, Baccharis pilularis ssp. consanguinea, and poison oak, Toxicodendron diversiloba) and mixed evergreen forest. As one travels inland and upward, remnant indigenous perennials are reduced to isolated pockets such as the Idaho fescue (Festuca idahoensis) populations on Spanish Ridge. Introduced annuals dominate the xeric grassland sites and introduced perennials occupy the mesic sites not taken by mixed evergreen forest.

The fourth major plant community is manzanita/ceanothus chaparral which totals about 6,000 acres. It is found mainly on inland sites where soil moisture regimens are too dry to support mixed evergreen forests. Characteristic climax taxa are members of the genera Arctostaphylos and Ceanothus.

Within the King Range WSA, there exist four significant botanical resources:

(1) The Mattole dune system is of high ecological significance. It is unique in that the aggressive introduced European dune grass, Ammophila arenaria, has not yet encroached on the Mattole dunes as it has on most coastal dunes north of San Francisco.

(2) The leafy reedgrass, Calamogrostis foliosa, found along the WSA's coastal strand is another botanical resource. This species is a U.S. Fish and Wildlife Service candidate for listing as threatened of extinction (Federal Register, Vol. 45, No. 242, 15 December 1980). In that C. foliosa is a candidate species, it is considered sensitive by BLM and is thus protected under policy (IM-CA-85-35).

(3) Remnant populations of the once ubiquitous unaltered coastal prairies is a special botanical value. Isolated stands of such species as California melic (Melica californica) and Idaho fescue in today's coastal prairie provide an important window into California's floristic past.

(4) Within the WSA are approximately 600 acres of old-growth Douglas-fir forest located in the Honeydew Creek watershed. The old-growth forests provide us with an opportunity to observe the pristine ecosystem. These forests not only support old-growth dependent animal species but promote regional biological diversity, conserve plant and animal genetic stock and provide opportunities for scientific research.

Soils and Watershed Resources

The King Range watersheds have some of the highest natural rates of soil erosion and sediment yield in the United States. In some areas of the King Range man caused erosion has added to these rates through road building, logging, grazing and burning.

These extremely high natural or geological rates of erosion and sediment production are due to a combination of relatively weak rocks, very steep slopes, and high rainfall. These same factors are also major reasons why the area is still largely roadless and thus eligible for consideration as wilderness.

Water yield is estimated at 82 percent of total precipitation. Average runoff in the Mattole River drainage is 970,100 acre feet. An estimated 55,300 acre feet of runoff drains from Bear Creek annually, while Honeydew Creek's runoff is estimated to be about 52,300 acre feet. Use is almost nonexistent within the area. None of the coastal streams are used at all except by wildlife, livestock and an occasional human. Outside the Area, Honeydew, Bear and Squaw Creeks contribute runoff to the Mattole River, but the river is subject to almost no direct consumptive use. Only about 350 acres of agricultural land are irrigated by direct diversion from the river. There are no impoundments, either within the King Range Area or downstream. Most domestic and agricultural water is obtained from springs on private land, and there are a few wells, mainly along the Mattole River.

The steep, unstable topography causes many slumps and slides. Stream cutting of the toe of these features is the main natural contributor of sediment. The heavy vegetative cover prevents much sheet erosion. However, where vegetation is removed erosion may become a very serious problem. There are occasional massive land movements, such as may be caused by earthquakes, which move great quantities of earth and rock down the watershed in a short period. It is estimated that approximately 80 percent of the sediment load is a product of natural erosion.

Man-caused erosion results mainly from three kinds of actions. Logging can cause extensive ground disturbance and can contibute heavy sediment loads to streams. Most of the private land in the unit has been logged, but almost none of the public lands. The logging practices employed on these private lands have definitely contributed to sediment loading. Road building is probably the main cause of erosion and sedimentation. There is some evidence of this on the grasslands along the northern boundary of the unit. Finally, conversion of timberland to grassland removes the deep rooted plants and thus lowers soil stability. This has been done on portions of a ranch in the northeastern part of the Area.

Pollutants other than suspended and free sediment have not been found to be a problem in the King Range streams. There are, however, several streams flowing into the ocean south of Big Flat that are high in calcium that is caused by the rock formations where the streams originate.

Wildlife

The general vicinity of the King Range National Conservation Area contains a unique mixture of terrestrial and marine habitat, supporting a wide diversity of animal species. Offshore rocks, kelp beds and tidal areas are inhabited by seals, sea lions and a variety of marine birds and play an important role in the life cycle of a variety of fish species. The terrestrial Douglas-fir forest and coastal chaparral habitat types support populations of black-tailed deer, black bear, quail, blue grouse, and a wide variety of nongame birds and mammals. Numerous raptors and a variety of fur-bearers, such as river otter and mink occupy the area. Several threatened wildlife species have been observed in the area, including the brown pelican, bald eagle and peregrine falcon.

Terrestrial Wildlife

Black-tailed deer are present in the KRNCA, but populations do move locally in response to weather changes and forage "green-up." During the period from October to May the grassland communities receive an influx of deer seeking succulent vegetation. The chaparral communities provide deer browse year-long.

There are no direct estimates of deer populations or herd composition for King Range. The proportion of deer numbers to habitat acreage can only be estimated from the condition of the vegetation in the primary deer forage areas and concentration areas. Heavily used areas, such as riparian habitat and grassy openings, contain over 100 deer per square mile. More lightly used areas, such as the interior of the chaparral stands, contain over 10 deer per square mile. It can be concluded that the concentration areas are overpopulated and deer habitat is declining.

Black bear are present over the entire King Range, but are most often observed north of Big Flat and King's Peak. Bears prefer the Douglas-fir forest, particularly the riparian areas where berry-producing shrubs are abundant.

Mountain lion are known to inhabit the KRNCA, but no population estimates have been made. Specific use areas have not been identified. Bobcat and coyote are apparently present in large numbers, based on observed sign and reports from local landowners.

At present an attempt is being made to reestablish Roosevelt Elk in the King Range.

California and mountain quail, blue grouse, gray squirrel, brush rabbit, black-tailed jack rabbit, mourning dove, and band-tailed pigeons constitute the upland game species in the KRNCA. All are distributed throughout the King Range, but each species demonstrates definite habitat preferences.

The entire King Range is apparently a wintering area for many raptors, particularly sharp-shinned and Cooper's hawks. Turkey vultures summer in the KRNCA and leave in September for more southerly wintering areas. No complete survey of osprey use has been made, but nests have been identified near the Mattole River, Big Finley Creek, and Bear Creek. Several osprey nests were destroyed north of Nooning Creek as a result of logging activities in the late 1960's.

Blue heron, river otter and mink are found in the immediate vicinity of the larger streams, in particular Honeydew Creek and the Mattole River.

Aquatic Wildlife

The Mattole River is the major inland terminus for nine tributary streams, whose headwaters lie within King Range. Additionally, 12 coastal streams flow directly into the Pacific Ocean. Many of these streams provide spawning and rearing habitat for steelhead, silver salmon and king salmon. About 80 miles of the King Range tributaries contain sufficient water to support fish populations. All of these streams are free-flowing, but contain some log jams and waterfalls which limit the passage of fish.

Coastal streams, which flow directly into the ocean, arise high on the western slopes of King Range. Some headwaters approach the 4,000-foot elevation. Stream gradients often exceed five percent and streams are often less than three miles in length. Stream bottoms are composed of large alluvial material, containing large amounts of rock and fines that fill in pools and provide unsatisfactory salmonid spawning areas.

The inland streams flowing into the Mattole offer much better salmonid habitat. Drainages are larger and, while headwaters are often as steep as the coastal streams, the inland stream gradients moderate quickly so that there are long stretches of riffle area and sizeable pools.

Rearing of juvenile steelhead and salmon occurs to some extent in most streams, but low summer water flows and high temperatures limit overall rearing capacity. Bear Creek and Honeydew contain numerous steelhead juveniles during the summer since pool habitat and cool water temperatures are not limiting. Coastal streams also contain juvenile fish, but these migrate to the ocean immediately after the first high water in the fall.

Resident fish species are limited to sculpin and rainbow trout. Sculpin are present in every stream in low to moderate numbers. Use of stream habitat by resident rainbow trout is hard to determine because of overlaps with steelhead habitat. Whale Gulch is the only stream restricted solely to resident trout. Lampreys migrate into many of these streams and nests have been observed in Honeydew Creek.

Marine Wildlife

There are 25 miles of coastline near King Range, providing areas of offshore rock, kelp beds, and tidal habitat. While these areas are outside of the WSA they contribute to the uniqueness of the area. Offshore rocks are concentration areas for stellar and California sea lions, harbor seals, and a variety of sea birds. Rocks used as rookeries by cormorants are identified in U.S. Fish and Wildlife Service inventories (1980). The entire coastline is utilized by marine wildlife, but Gorda Rock and the general Punta Gorda offshore area is an important concentration area for the stellar sea lion and other marine mammals.

The intertidal zone between the Mattole River and Whale Gulch (south of Chemise Mountain) was designated as an Area of Special Biological Significance (ASBS) by the California Water Resources Control Board. The concept of "special biological significance" recognizes that fragile or valuable biological communities deserve special protection by maintenance of natural water quality conditions. The King Range ASBS is recognized as being able to provide valuable baseline data to the scientific community because of the undisturbed nature of the coastal zone.

Sensitive Wildlife Species

Endangered wildlife species in the KRNCA include the brown pelican, bald eagle, and peregrine falcon. The spotted owl, a BLM sensitive species, is present in several forested areas.

Minerals and Energy Resources

A Mineral Resource Potential report was prepared by the U.S. Geological Survey and the Bureau of Mines for the King Range and Chemise Mountain WSAs to identify energy and mineral resources as defined by the wilderness study policy.

The summary of the report states:

"The potential for economic development of energy-related or metallic mineral resources in the King Range and Chemise Mountain Instant Study Areas is low to moderate as indicated by geologic, geophysical, and geochemical investigations.

"No oil or gas seeps or coal seams were detected within the King Range or Chemise Mountain Study Area. The low porosity and permeability of the Franciscan sandstones that underlie these areas indicate a very low potential for oil or gas. The geothermal resource potential of these areas also is low.

"Minor manganese resources occur adjacent to the southeast corner of the King Range Instant Study Area near Queen Peak. The manganese forms small stratabound deposits associated with radiolarian chert and pillow basalt. The known deposits are too small and the manganese too low in concentration for further economic exploitation. Similar manganese mineralization may be within the belt of melange in the southeast corner of the King Range area and within the Chemise Mountain Instant Study Area, but economic deposits are unlikely.

"Although there has been historical base and precious-metal exploration activity north of the King Range in the Mattole River drainage, our geologic and geochemical field data indicate almost no gold potential and low potentials for lead, zinc, copper, and silver. During this investigation, one highgrade vein and several minor veins containing lead, zinc, copper, and silver were discovered at Point Delgada immediately south of the King Range Instant Study Area. The vein mineralization is Miocene and cuts cretaceous basalt flows, dikes, flow breccia, and younger overlying sedimentary rocks of the King Range. The vein mineralization at Point Delgada could be remobilized from more extensive unexposed stratabound base-metal mineralization at depth. Traces of lead and zinc detected within the King Range Instant Study Area may have similar stratabound or vein origins, but no resource potential is indicated. Minor copper mineralization with associated lead, zinc, and manganese anomalies within the Chemise Mountain Instant Study Area is of low economic potential because of the sheering, isolation, and lenticularity of the basaltic and cherty rocks within the melange that hosts this mineralization."

This report is available for review at the Ukiah District or Arcata Resource Area offices, or a copy can be obtained for $3.00 at the Ukiah Office.

Currently, there are 14 lode claims within the King Range National Conservation Area which were filed in 1982; these are east of the WSA near Queen Peak.

The area has been identified as having potential for wind energy development. There are no leases at the present time. The area is unlikely to be considered prime resource for development in the near future due to limited geographic extent of the resource and geographic isolation (California Energy Commission, personal communication, 1984).

Livestock Grazing

The coastal prairie contains approximately 4,000 acres and provides 3,300 animal unit months (AUMs) of forage for domestic livestock. Five grazing leases occur within the WSA. Extant range improvements consist of about ten miles of fence, four barns and associated corrals, five exclosures, twenty utilization cages, and four water troughs. Grazing activity is limited to the northern end of the WSA, the Coastal strand, and Spanish Ridge.

The grasslands of the King Range have been ranched for over a century. However, grazing on Federal land was not authorized within the WSA until 1983 after determination of nonimpairment; this is because most of the land was not acquired by the BLM until then, and because land that was in public ownership prior to 1983 was so scattered that it was not manageable.

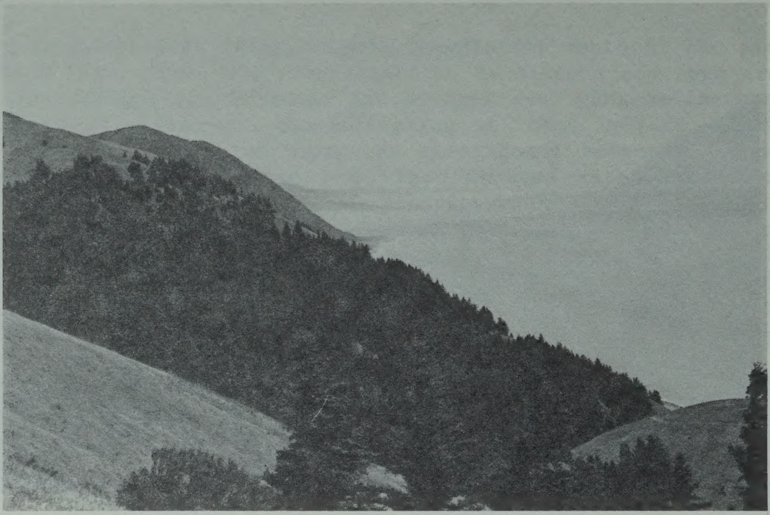
CONSISTENCY WITH OTHER LAND-USE PLANS

The King Range WSA is entirely within Humboldt County, and much of it falls within the coastal zone under the purview of the California Coastal Commission. None of the consequences of wilderness designation appear to be inconsistent with county or coastal policies or plans.

The King Range WSA is included in the Inventory of California Natural Areas published by the California Natural Areas Coordinating Council.

THE SHELTER COVE DEVELOPMENT AND BLACK SANDS BEACH FROM THE SMITH-ETTER ROAD. KALUNA CLIFF IS JUST LEFT OF PHOTO CENTER.

BLACK SANDS BEACH LOOKING NORTH WITH TELEGRAPH CREEK IN THE FOREGROUND. THE BEACH IS OPEN TO VEHICLES FROM TELEGRAPH CREEK TO GITCHELL CREEK.



SHELTER COVE (BACKGROUND) AND BIG FLAT (CENTER) FROM SPANISH RIDGE. THE PRIMARY USE OF THE WEST SLOPE, AS IDENTIFIED IN THE KING RANGE MANAGEMENT PROGRAM, IS PRIMITIVE RECREATION.

THE NORTHERN PORTION OF KING RANGE IS GRAZING LAND. LIVESTOCK USE HAS BEEN CHANGED FROM SHEEP RANCHING TO STEER PRODUCTION. THE PUNTA GORDA LIGHTHOUSE (CENTER) WAS IN USE FROM JANUARY 1912 TO FEBRUARY 1951.

CHEMISE MOUNTAIN WSA

MANDATORY WILDERNESS CHARACTERISTICS

Naturalness

Man's imprint on the landscape of the WSA is noticeable for approximately a mile along the north-south ridge and along a few east-west trending ridges because of construction of firebreaks in 1973. These intrusions are substantially diminished at the present time because rapid revegetation has occurred. Within a decade it will be difficult to tell whether mechanical equipment was ever used for fire suppression in this WSA. Approximately 20 acres of the northern portion of the area were logged several years ago, but the screening from thick vegetation substantially diminishes the impact from this intrusion. Hiking and horseback trails have been constructed throughout the area, and these developments enhance man's use and enjoyment of the WSA.

Opportunities for Solitude or Primitive and Unconfined Recreation

Solitude

Topographic and vegetative diversity provide opportunities for solitude. Views of the Pacific Ocean to the west and to the south into the Sinkyone Wilderness State Park enhance this wilderness value, however the Shelter Cove Marina, landing strip, and residential development detract from the feeling of solitude, as do the houses and barns visible to the east.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined types of recreation exist in the primitive area, however opportunities are not outstanding due to the rugged terrain and dense vegetation which restrict movement and the ability to get away from other users. Examples of the types of recreation are: hiking, backpacking, camping, horseback riding, photography, bird watching, and sight-seeing.

DIVERSITY IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM

Expanding the Diversity of Natural Systems and Features, as Represented by Ecosystems and Landforms

The Bailey-Kuchler designation for the Chemise Mountain WSA is "Pacific Forest Province - California Mixed Evergreen Forest." Specifically, the WSA is "mixed evergreen forest with rhododendron." Addition of Chemise Mountain to the Wilderness Preservation System would expand the diversity within the system because the rugged topography on the coast with this vegetation type is unrepresented.

Assessing the Opportunities for Solitude or Primitive Recreation Within a Day's Drive of Major Population Centers

See discussion for King Range WSA.

Balancing the Geographic Distribution of Wilderness Areas

See discussion for King Range WSA.

OTHER RESOURCE VALUES

Cultural Resources

Past investigation in the area (Levulett, 1976) indicates the area received little use in prehistory or the evidence has been obliterated by recent use. Either hypothesis has some validity as witnessed by the limited nature and poor condition of the two known prehistoric archaeological sites (CA-HUM-254 and 255).

Historically, a portion of the area was homesteaded and logged. An abandoned orchard, numerous stumps, and noticeable surface disturbance are indications of these uses.

Recreation

The Chemise Mountain WSA topography is generally steep and very rugged. The five-mile-long Chemise Mountain Trail is accessed from the BLM's Wailaki and Nadelos Campgrounds on the Bear Harbor Road. Recreational activities are generally restricted to hiking, sightseeing, photography, nature study and wildlife viewing. The trail, running the coastal ridge, provides a view of the Pacific Ocean, and surrounding lands. Beach access is by foot from Shelter Cove or from the trail. The beach, closed to motorized traffic, is rocky, rising abruptly from the shoreline which makes foot use very difficult.

Visual Resources

The Chemise Mountain Study area is similar in many respects to the landscape characteristics of the King Range WSA. The two areas are separated by the Shelter Cove Community. The extremely steep and rugged coastline of Chemise Mountain is continuous the full length of the study area with no beaches or low terraces. Rising dramatically, the barren cliffs give way to chaparral and sparse Douglas-fir in the drainages on the west slope to vast stands of chaparral on the ridge. The east slope is more densely covered with stands of Douglas-fir, tanoak, and madrone. Farrian meadow in the northern portion of the study area is approximately 30 acres in size and is one of the few relatively flat areas within the study area. This meadow has recently been used as a holding pen for elk transplants, and is currently fenced. In 1973, the Finley Creek Fire burned much of the northern portion of the area and is still showing its effects. A few firebreaks follow the ridgelines to the north with relatively little access to the south.

This unique coastline with its primeval character is rated as having high scenic quality. The majority of the users of this area are recreationists using the Chemise Mountain trail, which originates from two campgrounds at the eastern boundary of the study area. Portions of the study area's coastline are seen from Point Delgada at Shelter Cove in the middleground view. User and local resident sensitivity towards this area is high as demonstrated by its designation as a primitive area early in the King Range planning efforts. The Chemise Mountain area falls into the VRM Class II for protection of its natural values. This designation precludes management activities from being evident in the characteristic landscape.

Timber Resources

Chemise Mountain has approximately 700 acres of commercial forestland capable of a sustained yield of timber and a nominal standing volume of 500 MBF. Logging is not allowed in the Primitive Area.

Vegetation

Chemise Mountain WSA shares many similarities with the King Range WSA immediately to the north. The mixed evergreen forest is the dominant plant community (approximately 2,500 acres). Douglas-fir (Pseudotsuga menziesii) is the primary overstory species within the drainages and on the more mesic sites. Hardwoods (e.g., tanoak, Lithocarpus densiflora and madrone, Arbutus menziesii) begin dominating the overstory with increasingly drier soil moisture regimes. As sites become xeric, the hardwoods of the mixed evergreen forest become scrubby, and the community transcends into manzanita/ceanothus chaparral with manzanita (Arctostaphylos spp.) and ceanothus (Ceanothus spp.) representing the climax situation. This chaparral community dominates the central portion of the WSA.

Northern coastal scrub occurs to a limited extent near the immediate coast. Coastal prairies occur as small isolated islands. The grasslands are composed of introduced perennials (e.g., velvet grass, Holcus lanatus), introduced annuals (e.g., dogtail, Cynosurus echinatus) and native perennials (e.g., blue wildrye, Elymus glancus).

Botanical values are limited to habitat for leafy reedgrass, Calamagrostis foliosa, along the coastal bluffs.

Soil and Watershed Resources

The soil and watershed resources of the Chemise Mountain area are similar to those of the larger King Range WSA to the north. Similar very high natural erosion rates probably prevail although there are no data for this area alone.

Man-caused erosion is less than in the King Range WSA because there are no roads and there has been no logging except on a small, formerly private parcel at the north end.

There are no roads or ways in the WSA except for the newly acquired parcel at the north end. There is a firebreak along part of the ridgetop constructed during the 1973 Finley Creek Fire. Most of this has begun to revegetate naturally and is not causing any significant erosion.

There are no large streams within the WSA.

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Wildlife

See Wildlife Section under King Range WSA.

Mineral and Energy Resources

See section under King Range WSA.

Livestock Grazing

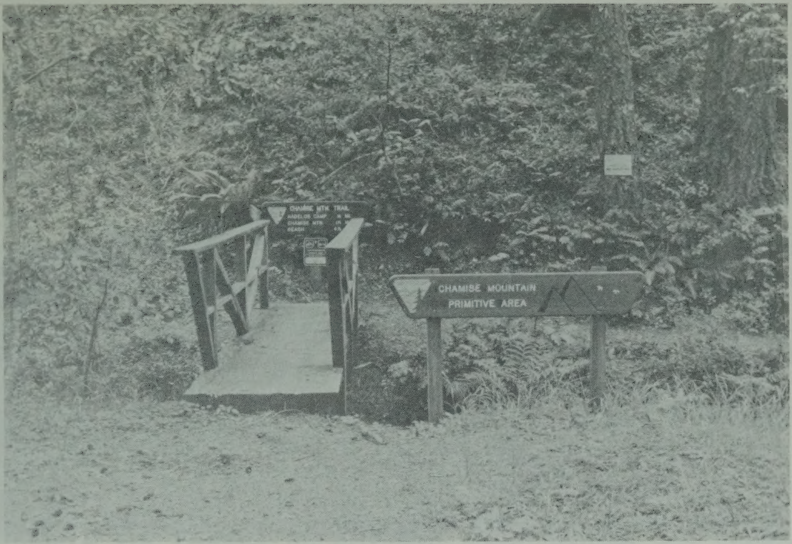
There is no livestock grazing within the Chemise Mountain WSA.

CONSISTENCY WITH OTHER LAND USE PLANS

The Chemise Mountain WSA is within Mendocino and Humboldt counties, and is within the coastal zone which is under the purview of th California Coastal Commission. None of the consequences of wilderness designation appear to conflict with any of the coastal or county policies or plans, particularly because wilderness designation of an existing primitive area has little or no effect on land use.

Coordinated management of Chemise Mountain and the Sinkyone Wilderness State Park would provide outstanding recreational opportunities.

Chemise Mountain is included in the Inventory of California Natural Areas published by the California Natural Areas Coordinating Council.



THE CHAMISE (SIC) MOUNTAIN PRIMITIVE AREA WAS ESTABLISHED BY BLM ORDER 3202 ON SEPTEMBER 19, 1975, THUS IMPLEMENTING THE KING RANGE MANAGEMENT PROGRAM FOR ZONE 4.

BEAR HARBOR AND SINKYONE WILDERNESS STATE PARK FROM THE TOP OF CHEMISE MOUNTAIN.

CHAMISE MOUNTAIN PRIMITIVE AREA FROM THE SHELTER COVE MARINA.

VIEW OF SHELTER COVE DEVELOPMENT FROM CHEMISE MOUNTAIN
(ELEVATION 2,598 FEET).

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

Recommending a wilderness study area or a portion thereof, as suitable for wilderness means that significant values exist that can be best protected, utilized, and managed under wilderness policy constraints.

Any area designated by Congress as wilderness will be managed within a discrete range of actions. These actions are described in the Bureau's Wilderness Management Policy and are the basis for analyzing or comparing the consequences of wilderness designation to other alternatives.

Wilderness designation merely limits some activities which can result in the nonuse of certain resources which in turn means that some potential environmental impacts are reduced or economic opportunities are foregone. This analysis evaluates the alternatives in regard to general aspects of potential operations and their compatibility with broad land use programs or critical resources. The details of some of the possible future activities are not evaluated due to a lack of knowledge about the nature and extent of the resources and the type and level of activity that might be proposed. Areas of obvious resource conflicts, potential for serious impacts, and high sensitivity are identified and analyzed. The impact discussion is limited to effects among the alternatives which are reasonably foreseeable.

IMPACTS

KING RANGE

Wilderness Values

Wilderness designations would benefit mandatory wilderness values primarily in the areas currently in Zones 6 and 7, where logging and road construction are threats to primitive values. Areas currently in Zones 1 and 2 are set aside for dispersed recreation, scenic values, and wildlife, so wilderness values are already protected to a great extent; designation would probably add a minor degree of legislative protection by withdrawing the area from mineral entry (which would prevent potential nuisance mining claims) and may provoke additional public interest to better patrol the area and enforce vehicle closures.

Considering that wilderness values are protected within the wilderness and in Zones 1 and 2, the total acres protected are:

Alternative 1 - 34,600 acres (29,300 acres wilderness; 5,300 acres in Zones 1 and 2);

Alternative 2 - 34,600 acres (32,900 acres wilderness; 1,700 acres in Zones 1 and 2);

Alternative 3 - 27,500 acres (all in Zones 1 and 2);

Alternative 4 - 27,500 acres (about 14,000 acres wilderness and 13,500 acres in Zones 1 and 2);

Alternative 5 - 27,500 acres (21,200 acres wilderness; 6,300 acres in Zones 1 and 2).

Recreation

The types of public recreation would not be affected by wilderness designation. The potential use of vehicles may be theoretically impacted by wilderness because some roads and ways would be closed to vehicles. However, most of the roads were privately controlled until recently, so the general public would not be denied any use which it has legally enjoyed in the past. Also, many of the "roads" were poorly constructed and are dangerous, and these will be closed and put to bed under all alternatives. Therefore, the effect of wilderness to vehicle use is minimal.

The Smith-Etter Road, which will be maintained under all alternatives, will provide access to the beach between Shelter Cove and the Mattole River. This access would provide enjoyment of any wilderness areas as well as for fishing and beach hiking.

Alternative 1, All Wilderness, restricts vehicles to below mean high tide, instead of allowing use of the way above the beach between Gitchell Creek and Telegraph Creek. For all practical purposes this restriction on vehicles is meaningless as the winter storms of 1982-83 and 1983-84 have obliterated sections of the way, making it impassable to any vehicles, and most ORV use is below mean high tide anyway. The Pacific Ocean and rugged terrain are the most effective constraints to vehicle use on the western boundary of the wilderness study area.

Cultural Resources

Cultural resource values currently in Zones 6 and 7 would benefit to some extent from wilderness designation under Alternatives 1 and 2 because of the prohibition on logging and road construction. See discussion under wilderness values and acreages on Table 2-1. Cultural resources are protected by law, and any logging or construction would be analyzed in an environmental assessment, so any adverse impacts to cultural resource would be mitigated. Therefore, the additional benefits of wilderness designation would not be significant.

Wilderness designation, technically, restricts the types of data recovery techniques, stabilization and protection, and access to cultural sites. However, the most significant sites along the coast that are threatened by the ocean are presently being excavated or stabilized. By the time wilderness is established the cultural resources would only need to be periodically monitored and maintained, and vehicular access could be provided along the beach.

Visual Resources

Inventoried Visual Management Classes are Class II (changes do not attract attention) for Zones 1 and 2 and Class III (changes may be evident but should remain subordinate to the landscape) in Zones 6 and 7. Wilderness areas are automatically classified as Class I (no evident changes permitted). Management classes provide a basis for analysis of visual impacts but are not an absolute prohibition on a proposed project.

The visual resources in Zones 6 and 7 would be protected from impacts of logging and road construction under Alternatives 1 and 2. This is the most significant beneficial impact wilderness designation would have on visual resources.

Protection and enhancement of visual resources is high priority in Zones 1 and 2 under the existing King Range Management Program (Alternative 3), so wilderness designation would not add any real protection to these areas. VRM Class I in a wilderness is merely a technicality which means nothing for Zones 1 and 2.

Timber Resources

Alternatives 1 and 2 would prohibit timber management operations on 6,500 acres of currently available commercial forestland in Zones 6 and 7, with a standing volume of 60,000 MBF. This is 26% of the timber production acreage and 54% of the standing volume in Sustained Yield Unit 08 (King Range National Conservation Area).

Alternatives 4 and 5 would not impact the existing management program (Alternative 3).

Actually, this loss of timber production because of wilderness designation may be significantly overstated. Wildlife inventories for Honeydew Creek, as required by the King Range Management Program, have not yet established wildlife use. If it is finally determined that timber production should be curtailed in the Honeydew Creek drainage to enhance wildlife, then some loss of volume will occur regardless of wilderness status.

Also, an operations inventory is required to determine exactly how much of Zones 6 and 7 can be economically logged, and this has not been done. Some loss of volume and acreage may result from such an inventory.

There are no local mills with significant dependence on timber from the King Range.

Vegetation/Soils and Watershed

In wilderness areas the vegetation would be subject to the forces of nature. Wilderness would allow vegetation to reestablish on fire trails, roads, and logged areas. In the long term the growth and succession of vegetation would enhance the visual resources by hiding openings and bare soil. Vegetation would help to stablize soil and decrease erosion and sedimentation. Because of the extreme gradients and high natural levels of erosion, the overall effect of vegetation on erosion rates would be small. However, in severely degraded small drainages the effect could be relatively great.

Much of the disturbance to vegetation and soil due to human activity is on the west slope (Zone 2); these areas would be revegetated under all alternatives.

Alternatives 1 and 2 prohibit logging in various portions of Zones 6 and 7, thus preventing man-caused changes in species composition and structure of the existing vegetation. Prohibition on logging and road construction would prevent some erosion and sedimentation.

Wildlife

Alternatives 1 and 2 would protect wildlife species from human disturbance in various portions of Zones 6 and 7 because of a prohibition on logging activities. Wildlife is the primary resource consideration in Zone 7 under the King Range Management Program (Alternative 3), so wilderness benefit to wildlife in zone 7 would be minimal; only a very small sliver of Zone 6 is considered for wilderness, so again, wilderness benefit to wildlife is minimal.

Wilderness designation under any alternative would not unduly restrict hunter access or access for wildlife projects. All of the stable existing roads (Smith-Etter, Telegraph Ridge, and Saddle Mountain) will remain open and maintained under all alternatives. These three roads were originally identified in the management program as the only roads in Zone 2 to provide hunter access.

Minerals and Energy Resources

The potential for economical development of minerals is low to nonexistent, so wilderness designation would have no effect on mineral resources.

Wind energy potential was identified as a concern by the California Energy Commission during the wilderness inventory phase. Because of the rugged terrain, dense vegetation, and isolation of King Range, economical development of wind energy is very remote. In addition, while wind energy development was not specifically addressed in the 1974 King Range Management Program, the development of such facilities along the higher ridges in Zone 2 does not meet the management criteria specified in the plan.

Livestock Grazing

Livestock grazing would not be significantly affected by any of the wilderness alternatives. Grazing established at the date of designation would be allowed to continue at that level. There is little opportunity to increase the current grazing levels, so even potential livestock use would be unaffected by wilderness. Predator control is allowed in wilderness areas, although somewhat restricted by the Wilderness Management Policy.

Alternative 1 is constrained by the management policy, but the intent of the other alternative is to allow reasonable, efficient predator control even if it technically violates the Wilderness Management Policy. While there may be differences in impacts between Alternative 1 and the other alternatives in an academic sense, for all practical purposes the differences in impacts are probably negligible.

Socioeconomics

None of the alternatives would have a significant impact on local or regional economics. Alternatives 1 and 2 would preclude timber harvest on portions of the east slope, but the amount of timber is negligible to the economy.

Current recreational use is predominantly by local hunters and anglers and hikers from around California. However, there are temporary surges in visitor use when major magazines or newspapers print articles about King Range. This type of reaction could be expected shortly after designation of wilderness, but it would quickly subside to near-current levels. Additional visitors would spend some money in local stores and restaurants, but this contribution would be small and fluctuate according to season and publicity "selling" wilderness.

Demands for human services such as police, fire, road maintenance, search and rescue, and emergency medical services would slightly increase by wilderness designation, but again this would fluctuate according to season and publicity in major newspapers and magazines.

BLM has agreements with local volunteers for search and rescue, with the California Department of Forestry for fire suppression, and the United States Coast Guard is often involved with search and rescue along the King Range coastline. Increased visitor use may require the BLM to provide additional funds to local agencies or to provide services such as law enforcement officers trained in search and rescue and medical emergencies. Currently, the BLM is studying the desirability of assigning full-time Rangers to the King Range and wilderness designation may facilitate funding such services.

Unavoidable Adverse Impacts

None of the wilderness alternatives would have significant impacts on resource uses or human activities. There would be some loss of timber resources under Alternatives 1 and 2 but this is insignificant even on a local basis.

The intent of the King Range Management Program for Zones 1 and 2 is similar to the objectives of wilderness, so the only potential loss of wilderness characteristics by nondesignation would be by logging activities in Zones 6 and 7, and these areas are not as unique as the west slope.

Irreversible/Irretrievable Commitment of Resources

Wilderness designation is a legislative action that can be reversed or modified if public attitudes or demands change so there is no irreversible action by wilderness designation. A "purist" could construe that the loss of wilderness values through nondesignation, because of logging or other resource extraction, is an irretrievable loss. In the King Range, however, because of the rugged topography, high natural erosion rate, and dense vegetation, such disturbances quickly heal to the point that they are virtually unnoticeable.

The theoretical loss of resources due to wilderness, such as timber growth, is an irretrievable loss, but in this case is not significant even on a local level.

Cumulative Impacts

Concern has been expressed that wilderness in the King Range would be more "lock-up" of valuable resources. This analysis has shown that there are no mineral or energy resources and only negligible amounts of timber that could be affected by wilderness designation. Resource extraction and land uses have always been limited by the rugged topography. This fact, more than any Federal designation, limits reasonable use of the King Range.

CHEMISE MOUNTAIN

Wilderness Values

Both alternatives for Chemise Mountain WSA would protect the mandatory wilderness values from destruction or significant modification. The alternatives are essentially identical in intent and management direction. The designation as a Primitive Area prior to the passage of the Federal Land Policy and Management Act (which authorized the Bureau to formally recognize "wilderness" as defined in the Wilderness Act of 1964) was one way the Bureau could manage an area for its "wilderness values."

The objectives of establishing a primitive area state (43 CFR 6221.0-2 (1975 version)):

Lands designated as primitive areas shall be administered for public recreational use in a manner to protect primitive values, and to:

(a) Allow the free operation of natural ecological succession to the extent feasible for scientific and other study.

(b) Preserve solitude, physical and mental challenge, inspiration and primitive recreation values.

(c) Preserve public values that would be lost if the lands were developed for commercial purposes or passed from Federal ownership.

(d) Allow the natural restoration of the primitive character of the lands.

The similarities between the intent of the Primitive Area designation for Chemise Mountain in 1975 and wilderness designation are obvious.

Other Resource Values

Because of the similarities between a primitive area and a wilderness area described above, there would be no impacts to existing resources or uses by wilderness designation. The only real difference between the alternatives are technical or legal: (1) legislative vs. administrative, and (2) open vs. withdrawn from mineral entry.

While under wilderness designation Chemise Mountain would be withdrawn from entry under the mining laws and closed to mineral leasing (currently it is open to mineral entry with severe restrictions), there is no resource conflict because of the lack of mineral resources within the area.

Socioeconomics

See section under King Range WSA.

CHAPTER 5

PREPARERS AND REVIEWERS

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Technical/Environmental Coordinator, 5 years

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Botanist

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Geologist

Reviewers

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Branch Chief, Lands and Recreation, CSO

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CHAPTER 6

DISTRIBUTION OF THIS STATEMENT

Federal Agencies

Environmental Protection Agency, San Francisco, CA and Washington, D.C.

USDA, Forest Service, Lassen National Forest, Fall River Mills, CA
USDA, Forest Service, Six Rivers National Forest, Eureka, CA

USDI, National Park Service, Washington, D.C.
USDI, BLM, Susanville, Sacramento, and Ukiah, California; Washington, D.C.

Congressional Representatives

Douglas H. Bosco, U.S. House of Representatives, District 1, Santa Rosa, CA, and Washington, D.C.

Alan Cranston, U.S. Senate, San Francisco, CA
Pete Wilson, U.S. Senate, San Francisco, CA

State Agencies

California Coastal Commission, Eureka, CA
California Department of Fish & Game, Eureka, Sacramento, and Redding, CA
California Department of Forestry, Fortuna, CA
California Department of Parks and Recreation, Sacramento and Carlotta, CA
California Department of Water Resources, Red Bluff, CA
California State Clearinghouse, Sacramento, CA
California State Lands Commission, Sacramento, CA
California Water Quality Control Board, Santa Rosa, CA
Humboldt State University, Arcata, CA
Sonoma State University, Rohnert Park, CA
University of California, Davis, CA

State Legislature

Dan Hauser, California State Assembly, Sacramento and Eureka, CA
Barry Keene, California State Senate, Sacramento and Vallejo, CA

Local Agencies

Humboldt County:
- Assessor, Eureka, Ca
- Board of Supervisors, Eureka, CA
- Library, Eureka, CA
- Parks Departments, Eureka, CA
- Planning Department, Eureka, CA
- Public Works Department, Eureka, CA

Local Agencies (con't)

Mendocino County:
- Air Pollution Control District, Ukiah, CA
- Assessor, Ukiah, CA
- Library, Ukiah, CA
- Planning Department, Ukiah, CA
- Public Works Department, Ukiah, CA

Organizations

ARCOEX Exploration Company, Denver, CO
Association of Resource Conservation Districts, Sacramento, CA
Atlantic Richfield Company, Denver, CO
Audubon Society, Eureka, CA
Bachelor's Inc., Sacramento, CA
Banning Sportsman Club, Benning, CA
Bear Creek Watershed Association, Whitethorn, CA
Beginners, Inc., Redway, CA
Biosystems Analysis GGNRA, Sausalito, CA
Briceland Corporation, Whitethorn, CA
California Association of Four-Wheel Drive Clubs, Sacramento, CA
California Cattlemen's Association, Sacramento, CA
California Explorer, Mill Valley, CA
California Farm Bureau Administration, Sacramento, CA
California Native Plant Society, Davis, Eureka, Berkeley, Gualala, Potter Valley, Sloughhouse, Tiburon, and Ukiah, CA
California State Automobile Association, San Francisco, CA
California Trappers Association, Napa, CA
California Trout, San Francisco, CA
California Wilderness Coalition, Davis, CA
California Woolgrowers Association, Ferndale, CA
Chamber of Commerce, Sacramento, CA
Chevron Resources, San Francisco, CA
County Supervisors Association of California, Sacramento, CA
Cultural Resource Management, Inc., Davis, CA
Dry Creek Valley Association, Healdsburg, CA
Emerald Pond Forest Products, Santa Ana, CA
EPIC, Inc., Garberville, CA
Forest Lands and Products Company, Phillipsville, CA
Friends of Del Norte County, Gasquet, CA
High Ridge Lumber Company, Yreka, CA
Homestake Mining Company, Reno, NV
Humboldt-Del Norte Cattlemen's Association, Eureka, CA
International Woodworkers of America, Fort Bragg, CA
KQED TV Channel 9, San Francisco, CA
Laterite Correspondence Center, Crescent City, CA
League of Women Voters, Eureka, CA
Louisiana-Pacific Corporation, Ukiah and Alderpoint, CA
Madrone Council, Redway, CA
Marin County Motorcycle Association, Petaluma, CA
Mattole Center for Science and Education, Honeydew, CA
Mattole Grange, Garberville, CA
Mattole Resource Council, Arcata, CA

Organizations (con't)

Mattole Restoration Council, Honeydew, CA
Mattole Watershed Taxpayers Association, Garberville, CA
Mendocino County Cattlemen's Association, Willits, CA
Mendocino County Fish and Game Advisory Council, Ukiah, CA
Minerals Exploration Coalition, Denver, CO
NACENR, Arcata, CA
Native American Heritage Commission, Sacramento, CA
Natural Resources Defense Council, San Francisco, CA
North Coast Environmental Center, Arcata, CA
Northern California Fishermen's Wives, Fort Bragg, CA
Pacific Gas & Electric Company, San Francisco, CA
Piercy Craftsworks, Piercy, CA
Press Democrat, Ukiah, CA
Rancho Punta Gorda, Petrolia, CA
Red Mountain Association, Leggett, CA
Redwood Empire Four-Wheelers, Eureka, CA
Redwood Empire 4x4 Club, McKinleyville, CA
Redwood Gun Club, Arcata, CA
Regional Council of Rural Counties, Sacramento, CA
Sandeepany West, Piercy, CA
Save-the-Redwoods League, San Francisco, CA
Self and Shooters, Alhambra, CA
Sierra Club, San Francisco, Napa, Trinidad, Arcata and Fort Bragg, CA; Washington, D.C.
Sierra Pacific Industries, Arcata, CA
Southern California Edison, Sacramento, CA
The Cuttings, Garberville, CA
The Environment Radio Show, Albion, CA
The Nature Conservancy, San Francisco, CA
The Trust for Public Lands, San Francisco, CA
The Wilderness Society, San Francisco, Arcata, and Trinidad, CA
Thermal Power Company, San Francisco, CA
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